INTRODUCING THE GRAND CANYON

Introductions to Grand Canyon's History from Raven's Perch Media

Earle E. Spamer

THIS DIGITALLY PRODUCED PUBLICATION IS BEST VIEWED AS OPPOSING PAGES ON WIDE SCREENS

COVER — Ranger Naturalist Pauline (Polly) Mead Patraw giving a talk to visitors during an auto caravan trip along East Rim Drive, 1931. She was the first woman to serve as a Ranger Naturalist at Grand Canyon—the second in the entire National Park Service—obtaining the temporary position in 1930. When not busy with the park's visitors she studied the Grand Canyon's plants. In May 1931 she married Preston (Pat) Patraw, Grand Canyon's Assistant Superintendent. From 1932, the Patraws migrated through the Park Service's lands and administrative positions for years, but they returned to Grand Canyon when Pat was appointed Superintendent in 1954, remaining until his retirement the following year when they returned to their home in Santa Fe, New Mexico. Pat passed away in 1984; Polly in 2001.

(Photo National Park Service, Grand Canyon National Park)

INTRODUCING
THE GRAND CANYON

About the Frontispiece ▶

This was originally the frontispiece to THE GRAND CANON*, 1st Edition (2012).*

Major Powell led the first geographical and geological exploration of the Green and Colorado Rivers through the canyon lands in 1869. Partly as the result of his accounts of the expedition, embellished for more popular reading, artists sometimes romantically misportrayed the explorers' river journey through canyon defiles.

Quotation:

John Wesley Powell, *Exploration of the Colorado River of the West and its Tributaries* (Government Printing Office, Washington, 1875), p. x.

Illustrations:

John Wesley Powell photographic portrait when aged 40, shortly after his explorations of the Colorado River. *(National Park Service, Grand Canyon National Park)*

"Cañon of the Colorado," engraving by G. D. in *Harper's Introductory Geography; with Maps and Illustrations Prepared Expressly for This Work by Eminent American Artists* (Harper and Brothers, New York, 1873), p. 72.

". . . many of the mountains, plateaus, valleys, cañons, and streams were unknown and unnamed."

— John Wesley Powell

INTRODUCING THE GRAND CANYON

Introductions to Grand Canyon's History from Raven's Perch Media

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RAVEN'S PERCH MEDIA • 2025

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RAVEN'S PERCH MEDIA

BIBLIOGRAPHICAL AND HISTORICAL RESOURCES ON THE
GRAND CANYON AND LOWER COLORADO RIVER REGIONS OF THE
UNITED STATES AND MEXICO

INTRODUCING THE GRAND CANYON

by Earle E. Spamer

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Raven's Perch Media
Philadelphia, Pennsylvania, USA

Spamer, Earle Edward (1952–) [Spamer pronounced *spah*-mer]

Introducing the Grand Canyon : introductions to Grand Canyon's history from Raven's Perch Media

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CONTENTS

[in the PDF document each line is a hyperlink to that section or chapter]

Introducing . . . 1

The Raven's Perch Introductions 5

Raven's Perch Media Website (2018–present) 7

Looking Into THE GRAND CANON, Volume 1, Part A: Introduction, Statistics, Surveys and Commentaries (5th Edition, 2025) 21

1 Raven's Perch Media Pictorial Introduction (2012) 29
Reproducing Selected Illustrations from THE GRAND CANON *(1st Edition, 2012)*
And Dedication 53

2 Naming the Grand Canyon (2024) 55

3 "My God, there it is!" The World Encounters the Grand Canyon 1540–1926 (2022) 61

4 The Grand Canyon! A Worldwide, Year-By-Year Anthology and Annotated Bibliography of Personal Encounters with the World's Greatest Draw 1540–2022 (2022) 79

5 "Too numerous to name." Noteworthy (and Unfamiliar) People of the Grand Canyon of Arizona (2024) 87
An annotated biographical bibliography of historic connections, individual accomplishments, records of peculiar or transient interest, and notable visitors since 1540

6 Art of the Grand Canyon: An Introduction and Annotated Bibliography (2023) 95

CONTENTS

7 *Grand Canyon* by Sven Hedin: An English Translation of the Original 1925 Edition (2022) 127

8 View Finders: Grand Canyon Photographers And Cinematographers. Volume 1: Introduction and Annotated Photobibliography and Filmography (2023) 137

9 View Finders: Grand Canyon Photographers And Cinematographers. Volume 2: Annotated Collection of Selected Postcards of the Early Tourist Era to the Mid-20th Century (2023) 161

10 "It was this way . . ." The Grand Canyon's Indubitable James White and John Hance: An Introduction and Annotated bibliography (2023) 171

11 Miles and Miles of Mules: An Annotated Bibliographical Record of Grand Canyon's Assistants And Equine Associates (2024) 193

12 Contrary Canyon: A Bibliographical Guide to the Grand Canyon's Unconventional Past (second edition, 2025) 207

13 1956. A Resource Guide to the Grand Canyon Midair Collision of Trans World Airlines Flight 2 and United Air Lines Flight 718, June 30, 1956 (second edition, 2025) 213

14 Mapping Grand Canyon: A Chronological Cartobibliography and Chorographical Study (second edition 2025) 225

15 A Big Misunderstanding: F. W. von Egloffstein's 1858 Map of the Grand Canyon and Its Influence (2025) 233

16 The Colorado River of the West: Cartographic Styles of the 16th to 19th Centuries (2023) 249

17 Explorer: Andrew J. Carroll on the Colorado River, 1857–1858 (2022) 267

CONTENTS

18 Balduin Möllhausen's Grand Canyon (2022) 273

An English translation from Chapters 21–25 of "Travels Into the Rocky Mountains of North America to the High Plateau of New Mexico" [Reisen in die Felsengebirge Nord-Amerikas bis zum Hoch-Plateau von Neu-Mexico] *(1861). With a transcription of coinciding parts from Chapters 6–8 of the "General Report" of Lt. Joseph C. Ives'* Report Upon the Colorado River of the West *(1861)*

19 Grand Canyon Underground: The Bibliographical Record of Caves in Grand Canyon National Park, Grand Canyon–Parashant National Monument, and Vicinity (Arizona) (second edition 2025) 287

20 Groundwaters of the Grand Canyon Region (Arizona): A Research Bibliography (2024) 291

A research bibliography of groundwater hydrology and the record of environmental issues, legislative oversight, and Native American cultural concerns of groundwater use, with annotations: 1880–2024
Plus: A biblography of Grand Canyon springs ecology

21 Kaibab Plateau Ecology: A Research Bibliography (2024) 299

An inclusive research bibliography with annotations (1893–2024), Grand Canyon National Park (North Rim) and Kaibab National Forest (North Kaibab Ranger District), Arizona
Plus: A chronological–historical bibliography of bioecology and conservation of Kaibab deer

22 Bibliography and Annotated Checklist of Living Organisms First Named From the Grand Canyon and Vicinity (Northwestern Arizona) (second edition, 2025) 307

23 50 Years: Some Personal Recollections and Reflections (2024) 313

Appendix: Editions of the Grand Canyon–Lower Colorado River Bibliography 333

Colophon 342

INTRODUCING . . .

IT ALL BEGAN in 1974 with a bibliography of Grand Canyon geology. Simple enough. And at first it was a tidy thing, but unpublished. In short order its scope ballooned. Fifty years later, it was a worldwide Grand Canyon and Lower Colorado River bibliography covering every subject under the sun, including the sun—111,000 citations in 115 languages from the 16th century to the 21st. It was a series now, THE GRAND CANON. Promoted as a canon—an essential guide or list (a grand one at that)—the title was a play on nineteenth-century typographical spellings of "Grand Cañon" that non-Spanish sources often omitted the tilde on the "n" (thus "Grand Canon").

Raven's Perch Media was created in 2012 to restore the Grand Canyon bibliography's monographic appearance. Earlier editions of the bibliography, from 1981, 1990, and 1993 were out of print and superseded. The technology behind an interactive, updatable online database version that had supplanted the print monographs in 2000 was beginning to falter. (The so-called Internet Edition was retired in 2021.) And it had lost touch with the very idea that the bibliography had far, far more than the selective returns from online queries. The revamped bibliography from Raven's Perch was digital, too, distributed on CDs and encyclopedic again in its visible whole. (See Chapter 23 herein, which relays recollections of 50 years of the project.)

In 2018 the Raven's Perch website was created, "a resource service and reference library for all who have interests or stakeholder concerns in the Grand Canyon and Lower Colorado River regions of the United States and Mexico." At first it accommodated the renewed and continually growing GRAND CANON, available as a very large, searchable PDF that users could download. Soon, many more derivative bibliographies were produced, accompanied by a variety of volumes about cartographical and historical

aspects of the region. At present, some three dozen distinctly different volumes are available, a number of them having gone into newer editions.

Still, the Grand Canyon–Lower Colorado bibliography is like the metaphorical elephant in the room, unignorable amidst the rest of the offerings from Raven's Perch *(see the Appendix herein)*. But who *reads* a bibliography? Lists of citations are not especially engaging, regardless of how informative they may be. In fact, THE GRAND CANON is precisely the sort of resource that can be read—for its informative citations, naturally, but also for the profusion of annotations and other remarks it appends to many of those citations; something beyond the who–what–where–when of methodical bibliography. Thus, in the Fourth and Fifth Editions I defended the principle that bibliographies *can* be read. (Read a bit more about this in the section herein on THE GRAND CANON, Volume 1, Part A: Introduction.)

When Raven's Perch began to produce historically focused publications, some were strictly narratives; others were built around spin-off bibliographies about their subjects. In those spin-offs I often added extended informational introductions to offer something more interesting to read than a blur of citations—in other words, to give readers *something* to read. I incorporated viewpoints and observations that never had been noticed in the published literature, ocassionally spun with a bit of humor. Eye-catching illustrations were inserted, too. These, then, are meant to engage readers, even in those works that were built around a bibliography! But scattered as they are, they fail to impart the idea that Grand Canyon has *many* particular stories.

One may correctly argue that there are suitable introductions to Grand Canyon's history already in print. They are admirable, focusing on the canyon's rich past, highlighting prominent events and people. Yet they necessarily condense some stories, omit others—and retell for the umpteenth time the same old stories that must be given space in every canyon history book no matter its angle. Now Raven's Perch Media relieves the reader with specific historical aspects that are undetected in the regular histories or may have been bypassed as being beyond the editorial guardrails of structured

narratives. It is the prefaces and introductions that I hope stand out and stand alone.

While these preliminaries can vie for attention, the reader of one book might be unaware of the others, which locate little-occupied vantage points. Thus the purpose of *Introducing the Grand Canyon* is to assemble these preludes into an anthology. Here, readers can be let into fascinating special aspects that may differ from the regular attentions of Grand Canyon's history. It is a sampler, of course, but a means by which the Canyon—and the people who were there—can be seen in new light or, for some of them, sighted for the first time. ▪ ▪ ▪

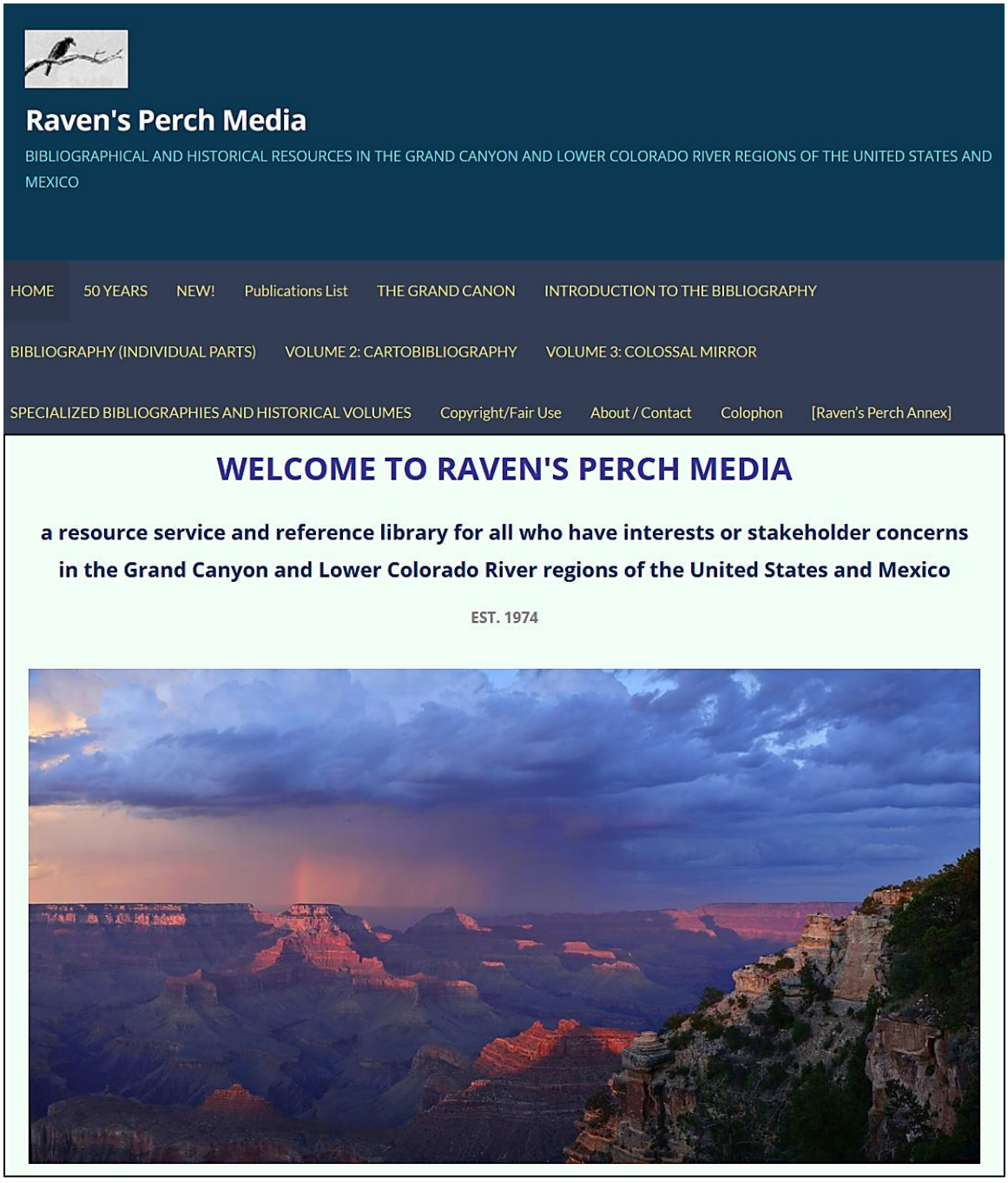
THE RAVEN'S PERCH INTRODUCTIONS

THIS VOLUME embraces introductory matter from publications produced by Raven's Perch Media. It is an anthology of uniquely selective historical perspectives. Extracted from 24 Raven's Perch publications, these prefatory and introductory texts and illustrations complement comprehensive histories written about the Grand Canyon. But in so doing they focus on specific aspects of Canyon history, sometimes from new vantage points.

The reprintings in this volume are slightly edited to remove internal references that do not pertain here, and hyperlinks that redirected readers to specific places within those volumes have been removed. Little attempt has been made to edit one introduction or another to avoid repetitive language (or in a couple of instances the use of identical texts); each reprinting is presented for its individual stance, published at different times. A few typographical errors have been fixed. The impulse to reedit some passages has been refused, though access dates of web-directed URLs have been reverified. Throughout, URLs do not display with the traditional, distracting blue underscores but as non-underscored darker blue hyperlinks; each is a "live" link in the digital PDF.

For each publication assigned to its own chapter, the Raven's Perch Media URL is provided in order to download the complete PDF if so desired; file size and number of pages are indicated. Each enumerated chapter is preceded by a frontispiece that illustrates the cover of the publication.

Introducing the Grand Canyon is a new way to see the Grand Canyon and its Colorado River. But perhaps the best place to start is where it all stands now . . .



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(Home page photo National Park Service, Grand Canyon National Park*)*

RAVEN'S PERCH MEDIA WEBSITE

https://ravensperch.org (2018–present)

BY EARLE E. SPAMER

> Once upon a midnight dreary, while I pondered, weak and weary,
> Over many a quaint and curious volume of forgotten lore—
>
> *Edgar Allan Poe, "The Raven" (1845)*

THE EPHEMERAL NATURE of websites guarantees that the Raven's Perch Media website will eventually be—to unabashedly borrow from Poe—"Nevermore." This is as good a place as any to review what it is (was).

I originated the Raven's Perch Media imprint around 2010 while recreating the monographic presentation of the Grand Canyon–Lower Colorado River bibliography. I was preparing to distribute it as searchable PDF documents on CD-ROM or DVD disks. (I had begun the bibliography in 1974, which saw inkprint editions in 1981, 1990, and 1993.) Two editions were created on CD (2012, 2015). In 2018, preparing to retire from a career in scientific and library collections I instituted the Raven's Perch Media website. There would reside the bibliography, downloadable as PDFs. And in due time numerous more spinoff bibliographies and historical texts joined it. As of early 2025, in addition to the five digital editions of THE GRAND CANON, there are 48 discrete titles; some of them have gone through additional editions. (Refer also to the Appendix herein for a summary of all editions of the master bibliography.)

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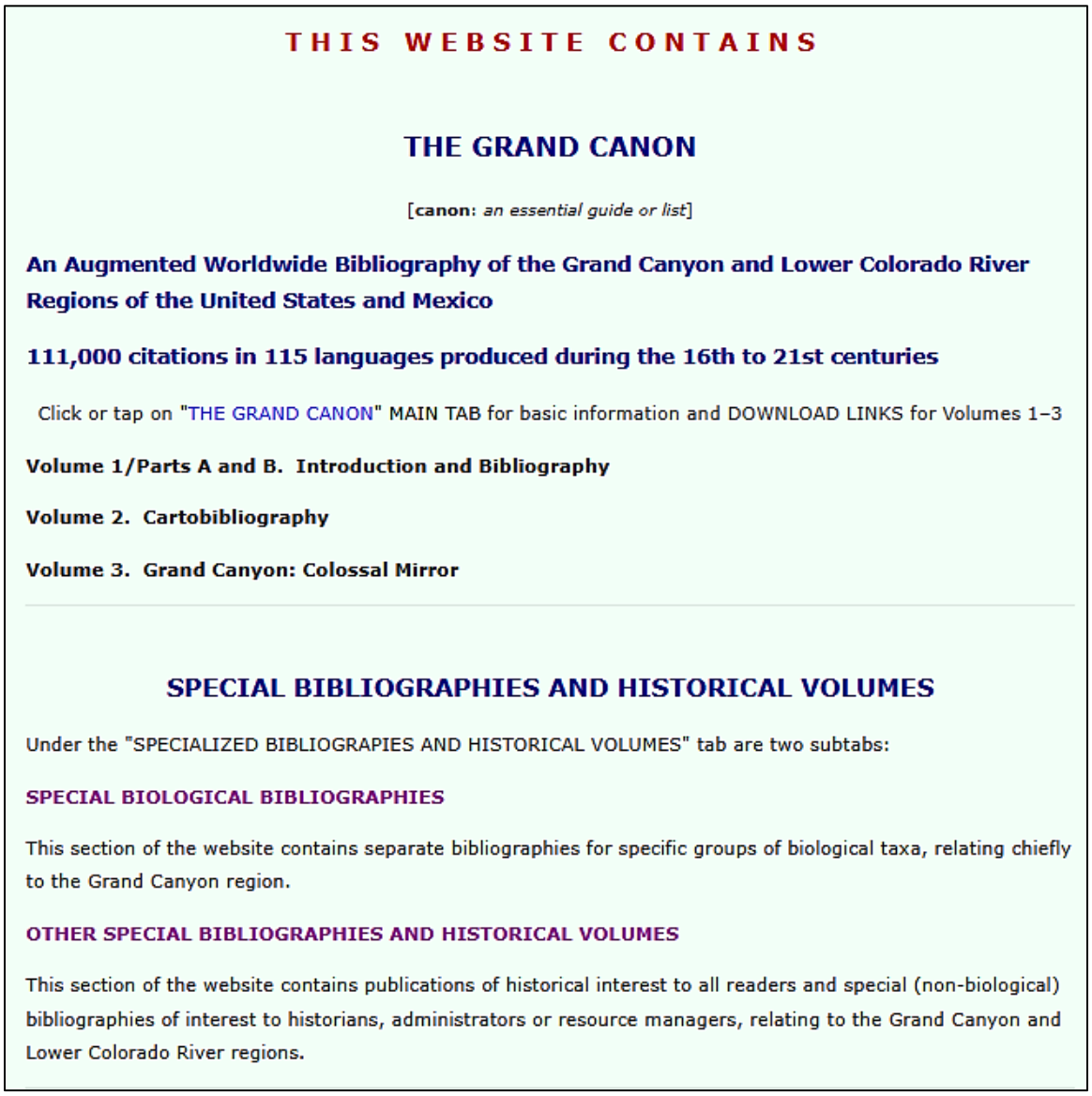

THIS WEBSITE CONTAINS

THE GRAND CANON

[**canon:** *an essential guide or list*]

An Augmented Worldwide Bibliography of the Grand Canyon and Lower Colorado River Regions of the United States and Mexico

111,000 citations in 115 languages produced during the 16th to 21st centuries

Click or tap on "THE GRAND CANON" MAIN TAB for basic information and DOWNLOAD LINKS for Volumes 1–3

Volume 1/Parts A and B. Introduction and Bibliography

Volume 2. Cartobibliography

Volume 3. Grand Canyon: Colossal Mirror

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Under the "SPECIALIZED BIBLIOGRAPIES AND HISTORICAL VOLUMES" tab are two subtabs:

SPECIAL BIOLOGICAL BIBLIOGRAPHIES

This section of the website contains separate bibliographies for specific groups of biological taxa, relating chiefly to the Grand Canyon region.

OTHER SPECIAL BIBLIOGRAPHIES AND HISTORICAL VOLUMES

This section of the website contains publications of historical interest to all readers and special (non-biological) bibliographies of interest to historians, administrators or resource managers, relating to the Grand Canyon and Lower Colorado River regions.

Part of the home page *(above)* indicates the major components of the website.

"THE GRAND CANON" tab of the website introduces the available components of the three volumes of THE GRAND CANON (Bibliography, Cartobibliography, and Nomenclature). *See the next two pages for pictorial displays of parts of the adjacent frames of this tab—not so much for reading at this scale but for their illustrative purpose.*

THE GRAND CANON

A Worldwide Bibliography of the Grand Canyon and Lower Colorado River Regions in the United States and Mexico

THE GRAND CANON is a unique bibliography containing 111,000 categorized and augmented citations of publications from around the world in 115 languages, with extensive background and supporting information. It is a bibliographical **canon** for the Grand Canyon and Colorado River regions in Arizona, Nevada, California, Baja California, and Sonora, including the Colorado River delta and adjacent upper Gulf of California. It cites publications produced between ca. 1535 and 2024. The bibliography project was begun by and has been continued by Earle E. Spamer for more than 50 years (since 1974).

The series comprises three volumes: Volume 1/Parts A and B (Introduction and Bibliography in two separate parts); Volume 2, "Cartobibliography"; and Volume 3, "Grand Canyon: Colossal Mirror" (see a quick list of the contents of these volumes in the frame to the right). All volumes can be downloaded as single PDFs (see buttons below).

On this website the entire bibliography of more than 13,700 pages is also divided into its 32 subject-specific parts. Each part, as well as other components of Volume 1, can be downloaded as individual PDFs. Many users will prefer this divided presentation because of the widely different subjects covered by the bibliography. All files are extracts from the full volume, retaining original pagination and layout. Use the "BIBLIOGRAPHY (INDIVIDUAL PARTS)" tab at the top of this webpage to access the individual parts, and for additional information about them.

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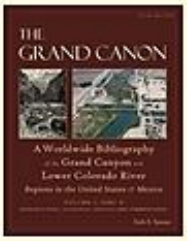

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Flip Book is Available for Part A only: https://online.fliphtml5.com/ryvqb/kiyu/

Download Volume 1/Part B (BIBLIOGRAPHY), 5th Edition, 2025 (PDF, 93 MB) 13,774 pp. (HUGE FILE)

"Granite Falls.—Kaibab Division.—Grand Canon."

By Thomas Moran. Engraved by H. H. Nichols. (Clarence E. Dutton, Tertiary History of the Grand Canon District, U.S. Geological Survey Monograph 2, 1882, Plate XXIV.)

QUICK LIST OF INDIVIDUAL VOLUMES OF *THE GRAND CANON*

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Volume 1/Part A: Introduction, Statistics, Surveys and Commentaries

Volume 1/Part B: BIBLIOGRAPHY

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11. Environment, Natural History, and Special Scientific, Technical, or Cultural Issues
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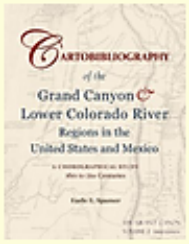

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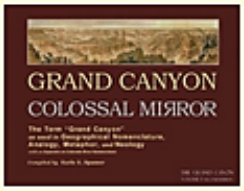

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Additional material in Volume 1/Part A includes essays relating to the craft of bibliography and the usefulness of monographic bibliographies even in the digital age.

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Volume 2. Cartobibliography

2nd Edition (2025)

[For a DETAILED table of contents for volume 2, see button at the bottom of this frame]

Front Matter

Section 1. Maps of the 16th-18th Centuries

Section 2. Maps of the 19th-21st Centuries

Section 3. Chronological List of All Items in Sections 1 & 2

Section 4. Guides to Quadrangles Used for Topographic, Geologic, and Other Reference Maps of the United States and Mexico

Volume 3. Grand Canyon: Colossal Mirror

2nd Edition (2025)

Front Matter

Section 1. Naming "Grand Canyons" Around the World, On Other Worlds, and in the Imagination

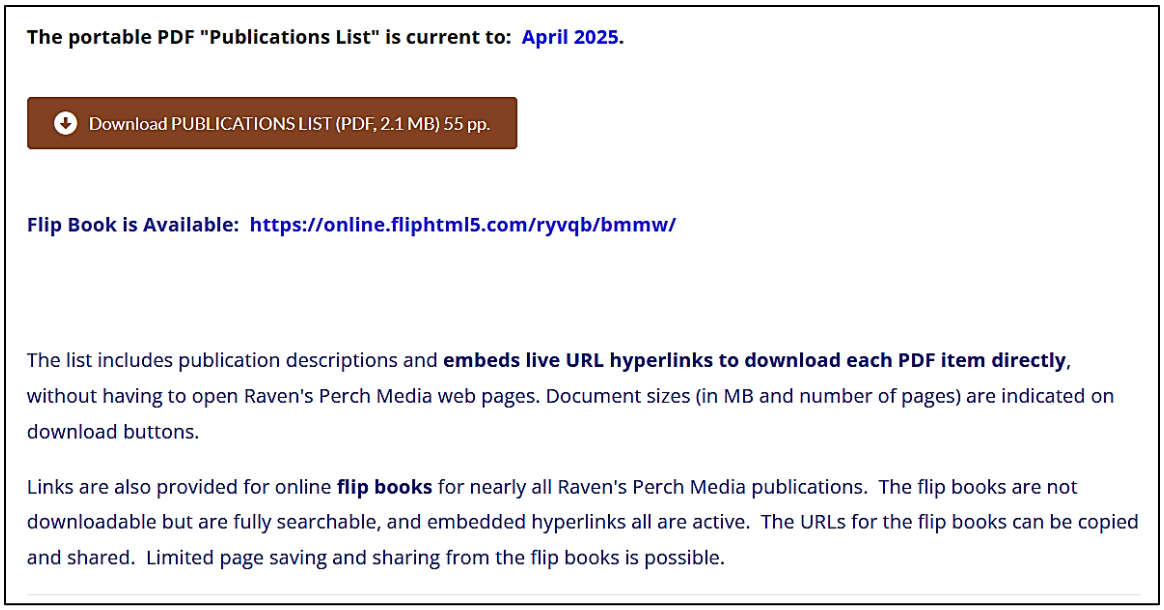
Section 2. The Term "Grand Canyon" in Analogy, Metaphor, and Neology

Download more detailed information using these buttons:

Download UNIFIED Table of Contents for VOLUME 1/Parts A & B (PDF, 1 MB)

Download DETAILED Table of Contents for Volume 1/Part B (BIBLIOGRAPHY ONLY) (PDF, 538 KB)

Download BIBLIOGRAPHY SUBJECT AREAS DESCRIBED (PDF, 1 MB)



The website also offers an occasionally updated "Publications List" that is a portable PDF document. It embeds URL hyperlinks with which users may download any publication from the Raven's Perch Media website. *(Sample pages from the April 2025 list are on the next two pages here.)*

APRIL 2025

RAVEN'S PERCH MEDIA

BIBLIOGRAPHICAL AND HISTORICAL RESOURCES ON THE GRAND CANYON AND LOWER COLORADO RIVER REGIONS

https://ravensperch.org

PUBLICATIONS LIST

with embedded download links for PDFs and Flip Books

IN THE PDF VERSION OF THIS LIST ALL URLs ARE LIVE HYPERLINKS

The Raven's Perch Media website does not require log-ins. There is no tracking and no information will be asked for.

All publications are free.

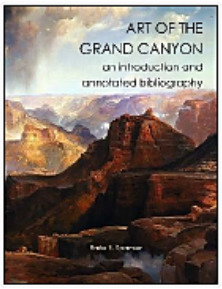
MOST ITEMS FROM RAVEN'S PERCH MEDIA ARE DOWNLOADABLE SEARCHABLE PDFs. MANY OF THEM EMBED ACTIVE HYERLINKS THROUGHOUT. THE LINKS IN THIS PUBLICATIONS LIST WILL DOWNLOAD THESE PUBLICATIONS DIRECTLY FROM THE RAVEN'S PERCH MEDIA WEBSITE. FILE SIZE AND NUMBER OF PAGES ARE INDICATED FOR EACH. MOST PDFs ARE DESIGNED IN BOOK LAYOUT FOR OPPOSING-PAGE VIEWING ON WIDE SCREENS, BUT VIEWING AS SEQUENTIAL PAGES IS SATISFACTORY.

NEARLY ALL PUBLICATIONS ARE ALSO AVAILABLE AS ONLINE FLIP BOOKS — LINKS ARE PROVIDED. THE FLIP BOOKS ARE NOT DOWNLOADABLE BUT ARE FULLY SEARCHABLE, AND EMBEDDED HYPERLINKS ALL ARE ACTIVE. THE URLs FOR THE FLIP BOOKS CAN BE COPIED AND SHARED. LIMITED PAGE SAVING AND SHARING FROM THE FLIP BOOKS IS POSSIBLE.

Note: When "Item Numbers" are mentioned herein, they pertain to unique identification numbers that are applied to every citation in THE GRAND CANON. They appear as decimal numbers; for example, 19.3484. The prefix indicates the Part number in Volume 1/Part B (*Bibliography*); the suffix is applied when an Item Number is assigned during the process of compiling the bibliography. This is more fully explained in Volumes 1 and 2. (All the Bibliography part numbers are shown in the separate itemization of downloadable sections and parts on pp. 37–43 of this Publications List.)

RAVEN'S PERCH MEDIA : SPECIALIZED BIBLIOGRAPHIES (GENERAL TOPICS)

ART



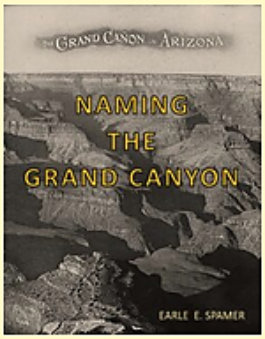
Art of the Grand Canyon
An Introduction and Annotated Bibliography
(2023)

21 MB, 356 pp.
https://ravensperch.org/wp-content/uploads/2023/05/Artwork.pdf
FLIP BOOK: https://online.fliphtml5.com/ryvqb/ding/

Arrangement:
Introduction
1. Trying Out the Canyon: First and Early Samples of Grand Canyon Art
   1851 — Richard Kern
   1858 — Balduin Möllhausen and Friedrich Wilhelm von Egloffstein
   About 1872–1875 —Various artists, for J. W. Powell
   1872–1873 — William Henry Holmes and Thomas Moran
   1875 and later —Edwin E. Howell
   1875 and later —Frederick S. Dellenbaugh
   1891 — Henry Moubray Cadell
   Turn of the Century — Thomas Moran
   1903 — François E. Matthes
   1906 — Louis Akin
   1923 — Sven Hedin
2. Reusing and Reimagining Illustrations
3. An Unusual Piece of Government Artwork

Part 1. Complete Bibliography Arranged by Author of Publication
Part 2. Selected Bibliography Arranged by Names of Artists

The Introduction is a very brief, admitedly arbitrary, primer of Grand Canyon art for readers who may not be very familiar with the subject, highlighting some usual and some appealingly unusual aspects about well-known and obscure artists alike, and a few of their pieces. It also finds some new perspectives and makes a few comparisons that might be thought-provoking, perhaps unrealized. The annotated bibliography gathers citations for publications, beginning in 1853, that in some way mention or illustrate the work of Grand Canyon artists between 1851 and 2023. It serves as a documentary effort that confirms the breadth and depth of artistic interest in the Grand Canyon. It also introduces numerous artists who have not had the privilege of being "recognized" in the world of art, such as those whose work was contributed "on the fly" to various journals and magazines, who are not acclaimed artists in their own right.



December 2024

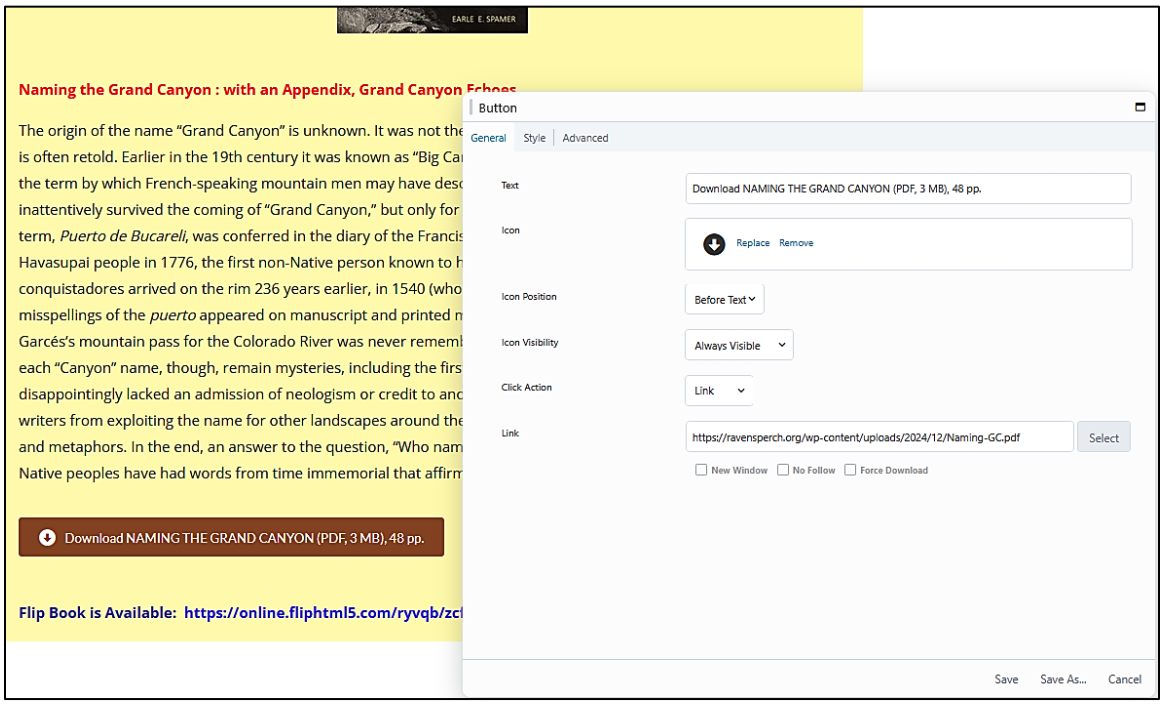
Naming the Grand Canyon : with an Appendix, Grand Canyon Echoes

The origin of the name "Grand Canyon" is unknown. It was not the neological invention of John Wesley Powell in 1869, as is often retold. Earlier in the 19th century it was known as "Big Canyon" and "Great Canyon," perhaps the translation of the term by which French-speaking mountain men may have described it—*un grand cañon*. Both appellations inattentively survived the coming of "Grand Canyon," but only for a couple of decades. The earliest known non-Indigenous term, *Puerto de Bucareli*, was conferred in the diary of the Franciscan friar Francisco Garcés when he visited the Havasupai people in 1776, the first non-Native person known to have reached the Grand Canyon since a party of Spanish conquistadores arrived on the rim 236 years earlier, in 1540 (who are not recorded as having given it a name). Ingenious misspellings of the *puerto* appeared on manuscript and printed maps in the 18th and 19th centuries but its association as Garcés's mountain pass for the Colorado River was never remembered, nor did it label an entire canyon. The origins for each "Canyon" name, though, remain mysteries, including the first known appearance of "Grand Canyon" in 1857 that disappointingly lacked an admission of neologism or credit to another source. This has not dissuaded travelers and writers from exploiting the name for other landscapes around the world or from exercising it in a superfluity of analogies and metaphors. In the end, an answer to the question, "Who named the Grand Canyon?" may be unessential, given that Native peoples have had words from time immemorial that affirm long spiritual and cultural associations with the canyon.

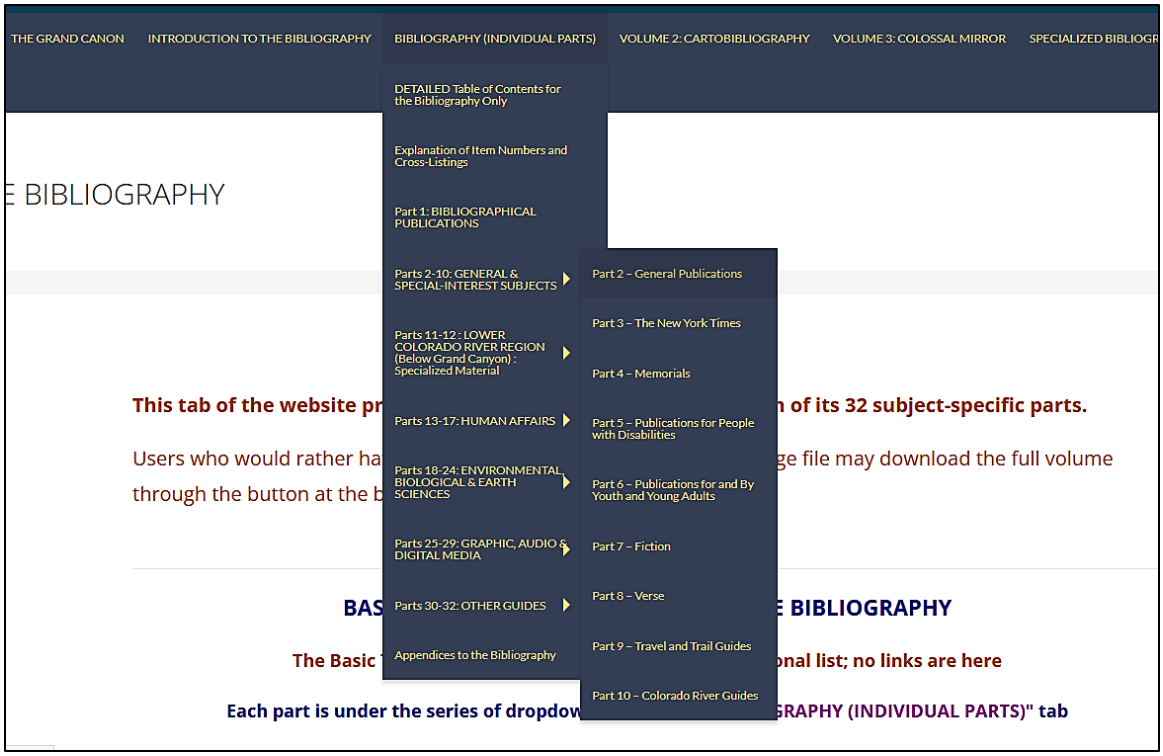
Download NAMING THE GRAND CANYON (PDF, 3 MB), 48 pp.

Flip Book is Available: https://online.fliphtml5.com/ryvqb/zcfa/

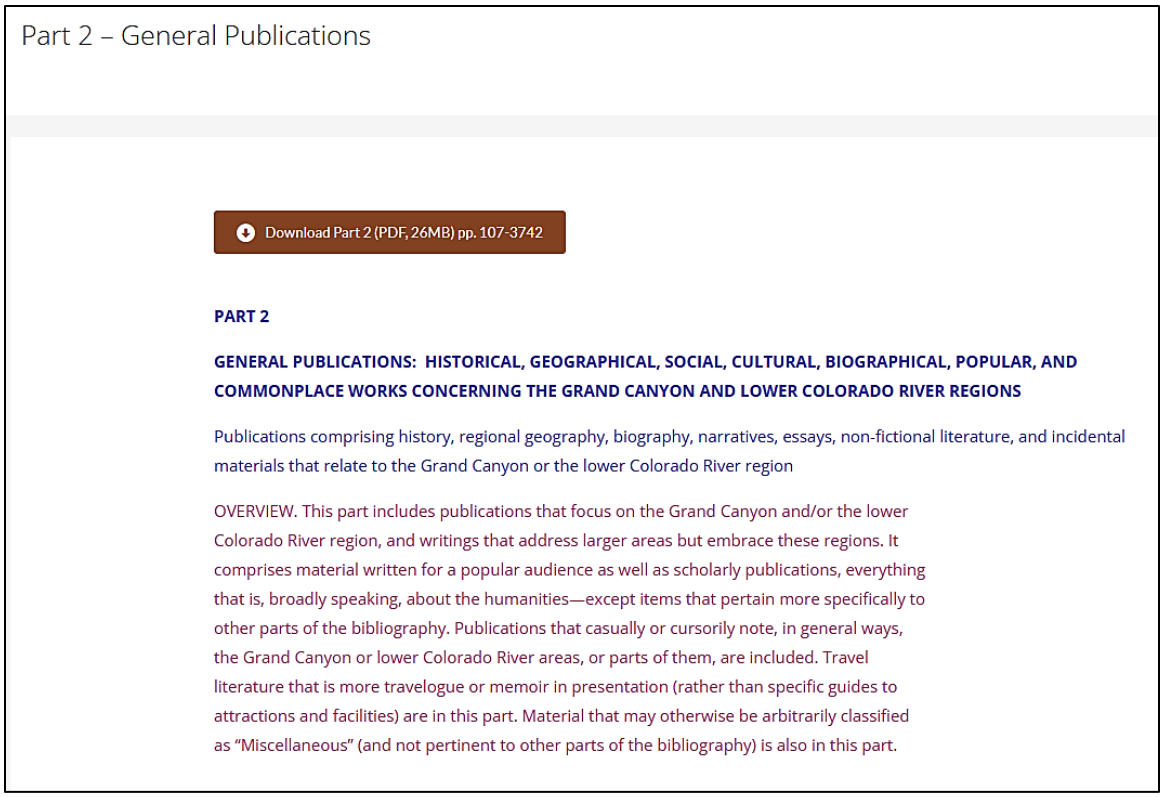
Under different tabs on the website, users have the opportunity to review content and to download documents. A sample is shown above. The brown button facilitates downloading the PDF directly from the Raven's Perch Media website; the file size and number of pages are indicated. A complementary link to an online (not downloadable) flip book version is also provided.



External services have been relied upon for website design. The web pages themselves are supported by WordPress, which I craft with the help of the "Beaver Builder" application. Shown above is an edit screen for the brown "Download" button on the page.



The Raven's Perch website also offers the master bibliography in its 32 individual parts. Through drop-downs under the "Bibliography (Individual Parts)" tab, users can access which ever part is of particular interest. "Part 2" is shown here.



The longevity of the Raven's Perch Media website is uncertain, but these pages display some of its appearance and describes in a general fashion how its users and I interact with it.

This chapter began with a pertinent quotation from Edgar Allan Poe's "The Raven." I am not an attentive devotee of Poe, though I was attracted to the correspondence of those lines as they pertain to the bibliography and its website—and of course the raven. Personally, I am fond of ravens in so far as I enjoy watching their intelligent interactions amongst themselves and (sometimes with consternation) with humans. Much like a bibliographer's tasks, the raven also is known for its habit of searching for and caching objects. I selected the raven as the name and logo for Raven's Perch Media based on the artistic portrayal made by Balduin Möllhausen in 1858 during the Ives expedition to the Grand Canyon. (See the Colophon herein, on the last page.)

FIFTH EDITION

THE GRAND CANON

A Worldwide Bibliography of the Grand Canyon and Lower Colorado River

Regions in the United States & Mexico

VOLUME 1, PART A

INTRODUCTION, STATISTICS, SURVEYS AND COMMENTARIES

Earle E. Spamer

LOOKING INTO THE GRAND CANON, VOLUME 1, PART A: INTRODUCTION, STATISTICS, SURVEYS AND COMMENTARIES

(5TH EDITION 2025) [1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2025/01/TGC-Vol-1_Pt-A_INTRO_5th-ed.pdf (16 MB, 676 pp.) In the Fifth Edition of THE GRAND CANON, Volume 1 was for the first time divided into two discrete books—this Part A, and Part B (Bibliography).

GENERAL INTRODUCTION

MUCH OF THE lengthy section [“Introduction to Content and Coverage”] is provided for the reason that THE GRAND CANON is meant to serve unknown users for a long time. I do not think that this work will be significantly reworked any time soon, though I can hope I am wrong. (I will not be available forever, continuing the project or to answer quesitons; of that I am not wrong.) As well as professionals and academics who resort to it, users will include students new to these subjects and to bibliographies, and plainly interested individuals. Newer generations may approach these subjects without experience; they may look for, or inadvertantly discover, insights on the methodologies I have used in a time before them.

The Introduction helps establish a sense of order by outlining the craft of bibliography and the construction of bibliographies—this one in particular. Inasmuch as there is no one way to compile a bibliography, these pages also present explanations and justifications for the system I have used, so that my style can be compared to other bibliographies, my methods queried, and critiques made as needed as time goes by. Surely, aspects of THE GRAND CANON’s methods will become antiquated. In fact, a few of its styles already approach “vintage” status for the reason that this bibliography is the result of five decades of work, having begun in the era of card catalogs and carbon paper. The concept of “digital” resources was nothing like that which is recognized today. For the same reason, citations in the bibliography append, where appropriate, explanatory notes that might be useful to users in the future; for example, an acronym may be spelled out, or an abbreviation or a peculiar term may be explained, because in the future their archaic meanings perhaps will have been forgotten or difficult to rediscover.

Much of this sort of detail is not usual in bibliographies but is included in this highly augmented one, with an eye to the future. Many citations append contextual notes, another embellishment not often encountered in bibliographies, which can guide users in establishing the potential usefulness of an item toward their work.

FROM THE PREAMBLE [2]

BIBLIOGRAPHIES should be read. They are useful tools, as expected, good for look-ups and for gathering statistics; and they are historical storehouses of resources that follow the evolution and progress of the subjects they embrace. Every person who is new to the things about, and to studies of, the Grand Canyon–Lower Colorado River country would do well to start to peruse the bibliography as an introduction to the *kinds* of things that are already available, and to take into consideration the notes and comments that appear with many citations. Of course this means "reading"—not the jump-in and -out activity of look-ups, but reading for comprehension.

A bibliography is an adventure. It consolidates works that relate to a single subject or purpose. It shouldn't be likened to the mixed-purpose list that appears at the end of many publications—unfortunately also called a bibliography—that really is a list of references consulted by the author; some of them may have no direct bearing on the theme of the author's publication.

My basic premise is that a bibliography can be *reading material*. It can be read for its historical perspective, to gain a broad awareness of what has been done, and the contexts of when, where, and by whom those productions have been created, and the sorts of things they are. If a bibliography also contains additional notes or commentary—separately or appended to individual citations—all the better. And indeed, how *does* one "read" a bibliography? Not so much as one would read a story, following the thoughts of paragraph after paragraph. Instead, it is read as paragraphs (citations) by themselves, each to be dismissed or acknowledged as useful or interesting; yet, as with conventional reading, with some anticipation for what may come. All the while, one does begin to grasp the idea that there is a lot of information that is beyond the simple list of authors, dates, and publishers.

[2] The "Preamble" appeared in slightly different forms in the Fourth and Fifth Editions of THE GRAND CANON. The entire Preamble from the current edition (5th, 2025) can be downloaded from the Raven's Perch Media website, https://ravensperch.org/wp-content/uploads/2025/01/Preamble_extracted.pdf (1 MB, 24 pp.).

As generally expected, a bibliography is consulted to find specific things. Publications can be discovered, too; things that may never have been found except by reading a bibliography. These discoveries can offer unexpected perspectives of, and contribute new information for, one's work; and further, other things might lead to new ideas for different work. My perspective on this may seem to be pedestrian, yet I have been offered these very opportunities in my own work over decades as a professional in museum collections, libraries, and archives. I have also witnessed the same avenues of discovery while working side by side with researchers, especially younger ones who are embarking on careers; and I have learned from their discoveries as well.

As a matter of necessity, THE GRAND CANON is a set of hybrid publications, three volumes in searchable PDF. Even the form of this Preamble anticipates the two kinds of readers this series will reach: those who are more comfortable with books (thus this is the "Preamble") and those who are most familiar now with digital files (thus this is a "Read Me" file). And to all, "read me" is also an appeal.

Effectively, THE GRAND CANON is now far too large to economically produce in a hardcopy format, at least without sacrificing some digitally embedded features that have been inserted to make it more easily used. Still, it is designed to appear more or less like a conventional book, for the very reason that it is meant to be read in this format. In this way it exposes all of its contiguous information in a familiar layout, not distracted by frames or sidetracked by other devices through which many strictly digital productions are engaged. This is presented in a way that, in some places, it is best viewed as odd- and even-numbered pages, side-by-side like a conventional book. Yet, I concede that many digital users will only view a page at a time, whether by choice or a technological limitation, so some pages display "continued" notes or specific language that refers to a previous or following page. And numerous hyperlinks redirect the reader to other parts of the volume and to external sources. Of course, these directional devices would not necessarily appear in a "real" book (except that, in much older books, it once was customary to include a catchword as a prompt at the bottom of the page being read, which presented the first word or syllable of the following page).

Were this an inkprint product, its thousands of pages—plus another thousand-plus in Volume 2, the *Cartobibliography*—would have to be spread across multiple volumes, which might seem to be a terrible waste of paper and materials. These are moot points in the digital environment. So THE GRAND CANON employs a font size and various typographical elements that are meant to allow easier reading and browsing. It is designed to be more relaxing than the tedious, often myopic formats of most bibliographies that seem to warn that they are not to be "read", just used for brief amounts of time. And, not being a huge inkprint product allow it to be distributed without cost. Even though a few people might even be willing to pay for a comfortable, shelf-resident, encyclopedic offering (I admit, I would like to have a copy, too), the cost of such a thing might require a Grand Canyon-deep wallet.

While even a multivolume bibliography might be welcomed by users who are more comfortable with hardcopy, THE GRAND CANON is more exceptionally useful as a single document, book-like in appearance, that encourages the use of its digital enhancements. Users have the ability to search within it, and the many embedded hyperlinks enable precise, instantaneous migration to different places within the document and to external sources. This would not be possible in an inkprint product. However, I do recognize that it is a step backward from being an online queryable database (a medium, though, which disadvantageously does not allow users to appreciate the whole). Regardless, the book medium still commands in this era of digital awareness and resources; and to top it off, bibliographies are viable and valuable even amidst the electronic clamor around us—see my essay, "'A necessary nuisance'—The Traditional Bibliography in the Digital Age." [3]

The entire Grand Canyon–Lower Colorado River bibliography project has been conducted for nearly a half century, on the cusp of analog and digital ways of doing bibliographical research. During this time the digital world inexorably closed in on me. I transitioned from index cards and typescripts to productions that were made as so-called "camera-ready copy" (for offset printing), and then to wholly digital products. I learned software of all sorts—

[3] https://ravensperch.org/wp-content/uploads/2025/01/Necessary-nuisance_extracted.pdf (1 MB, 20 pp.).

much of which became obsolete in short order—and with them I first crafted publications that went away to be born in paper format. In due course, publications were produced, from concept to release, entirely in digital formats. "Born digital" documents became a normal thing, though not so normal that they dis- or re-placed the world of print, as their loudest adherents promised would happen. Many publications are concurrently available in hardcopy and in digital format (often PDF, such as this one, from which, pointedly, print copies can be produced). True, the means by which publications are produced and disseminated has changed—epicly—over the centuries, particularly in the past few decades; and they will change more in coming decades and centuries. Still, they all have to be *read*.

But digital is tenuous. Whereas the world of ink survives from centuries past, the uncertainty of continued access to digital products centuries hence is unknowable. Today's web-based resources could comprise a digital Alexandria, a shuddering prospect. So THE GRAND CANON, because of its sheer size that demands a digital presence, has a shaky foothold on longevity. I hope that it can eventually survive somewhere, if not in print then in a medium for permanent legacies not now imagined, some insurance against a digital shipwreck. Is it "worthy" enough for that? It's not great literature, nor is it a significant work of historiography. But it *is* a consolidated, historical record of all works—as many as which could be found—for a pretty remarkable and celebrated part of the world. I am struck by the persistence of writers and artists who use the Grand Canyon and the Colorado River as mighty examples of inspiration even when they do not write about the places themselves, or for that matter even if they have never been there themselves. I think this broadly happens more often for THE GRAND CANON than for other inspirational or wondrous places; the Himalayas or the South Pole for example. And that most of the bibliography logs inkprint resources, spanning nearly five centuries, which all are accessible somewhere, is testimony enough that ink commands even in the digital world. ▪ ▪ ▪

BOOKS ARTICLES MAPS RECORDINGS FILMS DIGITAL MEDIA

THE

GRAND CANON

1548 2012

EARLE E. SPAMER

GLOBAL COVERAGE ILLUSTRATED ESSAYS BIBLIOGRAPHICAL SURVEYS

CHAPTER 1

RAVEN'S PERCH MEDIA PICTORIAL INTRODUCTION (2012)[1]

REPRODUCING SELECTED ILLUSTRATIONS FROM "THE GRAND CANON" (1ST EDITION, 2012)[2]

BY EARLE E. SPAMER

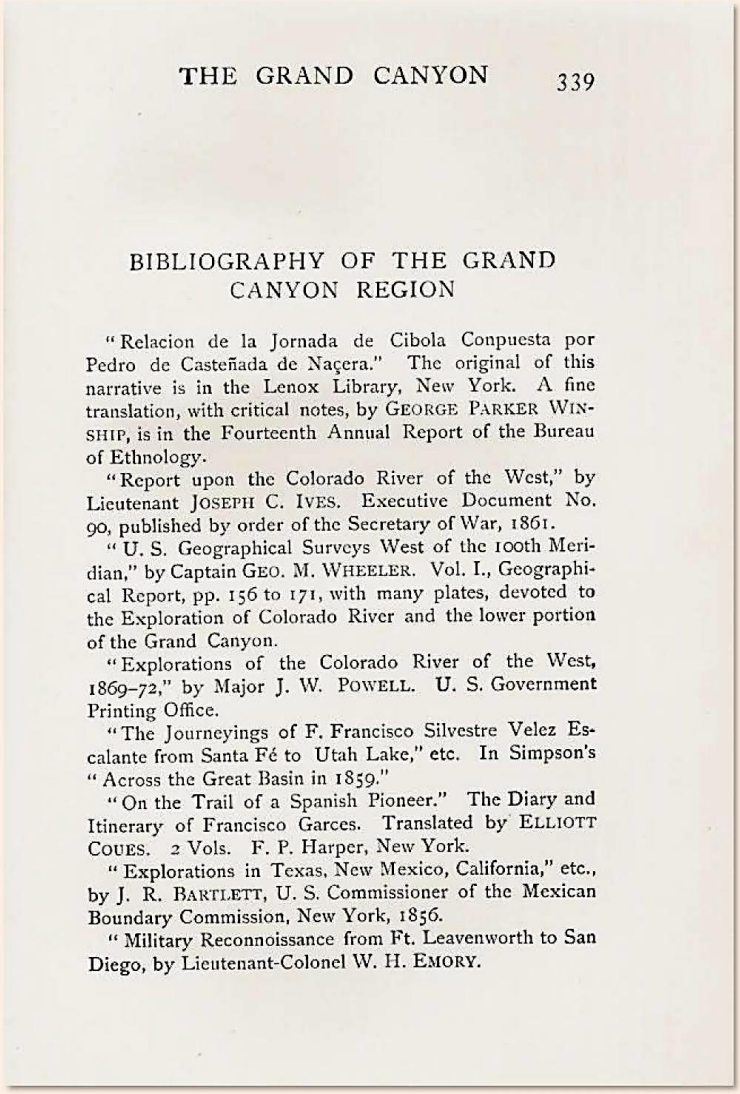
[1] The entire Pictorial Introduction: https://ravensperch.org/pictorial-introduction/ (67 MB, 136 pp.)

[2] https://ravensperch.org/wp-content/uploads/2019/09/THE-GRAND-CANON_1st-edition_2012r.pdf (72 MB, 5,296 pp.)

THE FIRST EDITION of THE GRAND CANON (2012) included many pages of graphical material, designed to increase the visual appeal of the bibliography and to introduce its users to some of the topics contained therein. The redesigned Second Edition (2015) removed these illustrative pages in order to avoid problems in creating the PDF and to improve navigation via hyperlinks in the bibliography. The "Pictorial Introduction" was then crafted to preserve these pages, thus offering a graphical overview of the entire bibliography.

This chapter displays a selection of pages from the larger "Pictorial Introduction." Some of them had been designed as frontispieces to the 32 separate parts of the bibliography. Illustrations may have been organized as part of spreads of two or more pages; and more pieces were interspersed throughout the volume.

Hopefully this sampler—and the full Pictorial Introduction accessible on the Raven's Perch Media website—is an interesting, casual way to draw attention to the enormously wonderful diversity of human affairs in the Grand Canyon and lower Colorado River regions—and the nearly 500 years of published materials that provide the evidentiary record of those activities.



THE GRAND CANYON 339

BIBLIOGRAPHY OF THE GRAND CANYON REGION

"Relacion de la Jornada de Cibola Conpuesta por Pedro de Casteñada de Naçera." The original of this narrative is in the Lenox Library, New York. A fine translation, with critical notes, by GEORGE PARKER WINSHIP, is in the Fourteenth Annual Report of the Bureau of Ethnology.

"Report upon the Colorado River of the West," by Lieutenant JOSEPH C. IVES. Executive Document No. 90, published by order of the Secretary of War, 1861.

"U. S. Geographical Surveys West of the 100th Meridian," by Captain GEO. M. WHEELER. Vol. I., Geographical Report, pp. 156 to 171, with many plates, devoted to the Exploration of Colorado River and the lower portion of the Grand Canyon.

"Explorations of the Colorado River of the West, 1869–72," by Major J. W. POWELL. U. S. Government Printing Office.

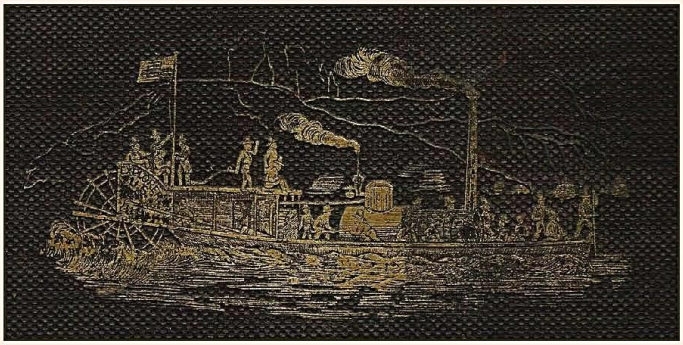
"The Journeyings of F. Francisco Silvestre Velez Escalante from Santa Fé to Utah Lake," etc. In Simpson's "Across the Great Basin in 1859."

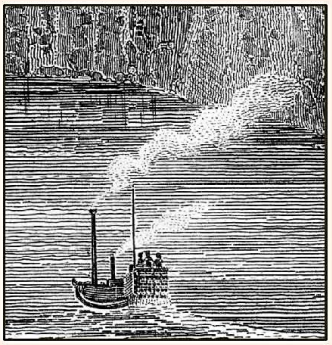
"On the Trail of a Spanish Pioneer." The Diary and Itinerary of Francisco Garces. Translated by ELLIOTT COUES. 2 Vols. F. P. Harper, New York.

"Explorations in Texas, New Mexico, California," etc., by J. R. BARTLETT, U. S. Commissioner of the Mexican Boundary Commission, New York, 1856.

"Military Reconnoissance from Ft. Leavenworth to San Diego, by Lieutenant-Colonel W. H. EMORY.

The earliest published bibliography compiled specifically for the Grand Canyon region appeared in George Wharton James's *In and Around the Grand Canyon* (Little, Brown, and Co., Boston, 1900). Above is shown the first page of this haphazard compilation.





The first explorations on the Colorado River took place from both downstream and upstream – Joseph C. Ives' army expedition from the Colorado delta in 1857–1858 *(above)*, and John Wesley Powell's boating voyage from the Green River in 1869 *(below)*. One of the most-quoted passages in Colorado River literature is that of the Powell party's entry into the Upper Granite Gorge of the Grand Canyon *(right)*. Almost none of the quotationists have, however, given a precise bibliographical credit or have shown the passage in facsimile.

(top left) An illustration of the *Explorer* on the Colorado. J. C. Ives, *Report Upon the Exploration of the Colorado River of the West* (Government Printing Office, Washington, 1861), front cover *(detail)*, embossed cloth, gilt.

(top right) Detail from "Mojave Cañon", Sketch by H. B. Möllhausen; lithograph by J. J. Young (Ives, *Report*, General Report Plate III).

CHAPTER VIII.

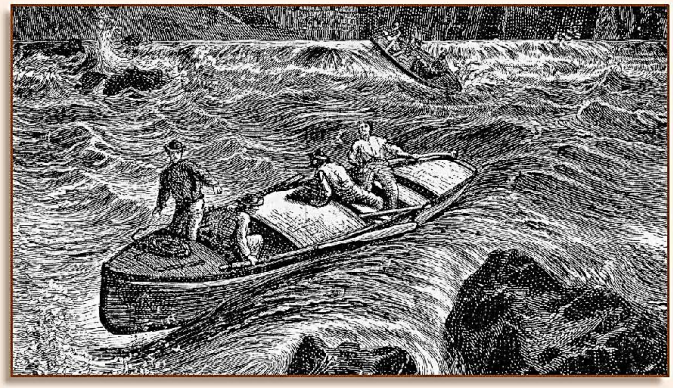
THE GRAND CAÑON OF THE COLORADO.

August 13.—We are now ready to start on our way down the Great Unknown. Our boats, tied to a common stake, are chafing each other, as they are tossed by the fretful river. They ride high and buoyant, for their loads are lighter than we could desire. We have but a month's rations remaining. The flour has been resifted through the mosquito net sieve; the spoiled bacon has been dried, and the worst of it boiled; the few pounds of dried apples have been spread in the sun, and reshrunken to their normal bulk; the sugar has all melted, and gone on its way down the river; but we have a large sack of coffee. The lighting of the boats has this advantage: they will ride the waves better, and we shall have but little to carry when we make a portage.

We are three quarters of a mile in the depths of the earth, and the great river shrinks into insignificance, as it dashes its angry waves against the walls and cliffs, that rise to the world above; they are but puny ripples, and we but pigmies, running up and down the sands, or lost among the boulders.

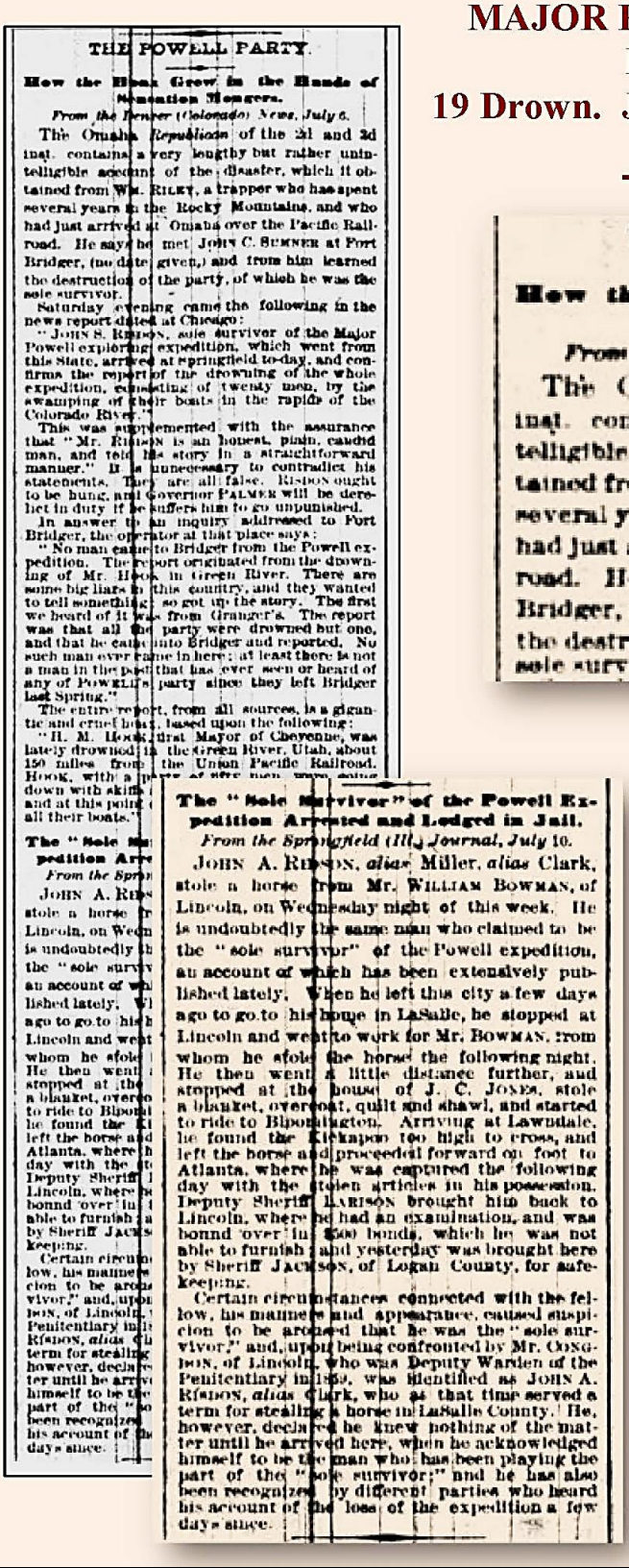
We have an unknown distance yet to run; an unknown river yet to explore. What falls there are, we know not; what rocks beset the channel, we know not; what walls rise over the river, we know not. Ah, well! we may conjecture many things. The men talk as cheerfully as ever; jests are bandied about freely this morning; but to me the cheer is somber and the jests are ghastly.

With some eagerness, and some anxiety, and some misgiving, we enter the cañon below, and are carried along by the swift water through walls which rise from its very edge. They have the same structure as we noticed yesterday—tiers of irregular shelves below, and, above these, steep slopes to the foot of marble cliffs. We run six miles in a little more than half an



(above) John Wesley Powell, *Exploration of the Colorado River of the West and Its Tributaries* (Government Printing Office, Washington, 1875), p. 80.

(left) "Running a Rapid", By W.L.S.; engraving by R. A. Muller (Powell, *Exploration*, Figure 28, facing p. 82) *(detail)*.



THE POWELL PARTY.

How the Hoax Grew in the Hands of Sensation Mongers.

From the Denver (Colorado) News, July 6.

The Omaha *Republican* of the 21 and 2d inst. contains a very lengthy but rather unintelligible account of the disaster, which it obtained from Wm. RILEY, a trapper who has spent several years in the Rocky Mountains, and who had just arrived at Omaha over the Pacific Railroad. He says he met JOHN C. SUMNER at Fort Bridger, (no date given,) and from him learned the destruction of the party, of which he was the sole survivor.

Saturday evening came the following in the news report dated at Chicago:

"JOHN S. RIDSON, sole survivor of the Major Powell exploring expedition, which went from this State, arrived at Springfield to-day, and confirms the report of the drowning of the whole expedition, consisting of twenty men, by the swamping of their boats in the rapids of the Colorado River."

This was supplemented with the assurance that "Mr. RIDSON is an honest, plain, candid man, and tells his story in a straightforward manner." It is unnecessary to contradict his statements. They are all false. RIDSON ought to be hung, and Governor PALMER will be derelict in duty if he suffers him to go unpunished.

In answer to an inquiry addressed to Fort Bridger, the operator at that place says:

"No man came to Bridger from the Powell expedition. The report originated from the drowning of Mr. Hoop in Green River. There are some big liars in this country, and they wanted to tell something; so got up the story. The first we heard of it was from Granger's. The report was that all the party were drowned but one, and that he came into Bridger and reported. No such man ever came in here; at least there is not a man in the past that has ever seen or heard of any of Powell's party since they left Bridger last Spring."

The entire report, from all sources, is a gigantic and cruel hoax, based upon the following:

"H. M. HOOK, first Mayor of Cheyenne, was lately drowned in the Green River, Utah, about 150 miles from the Union Pacific Railroad. HOOK, with a party of nine men, were going down with skiffs, and at this point [illegible] all their boats."

The "Sole Survivor" of the Powell Expedition Arrested and Lodged in Jail.

From the Springfield (Ill.) Journal, July 10.

JOHN A. RIDSON, *alias* Miller, *alias* Clark, stole a horse from Mr. WILLIAM BOWMAN, of Lincoln, on Wednesday night of this week. He is undoubtedly the same man who claimed to be the "sole survivor" of the Powell expedition, an account of which has been extensively published lately. When he left this city a few days ago to go to his home in LaSalle, he stopped at Lincoln and went to work for Mr. BOWMAN, from whom he stole the horse the following night. He then went a little distance further, and stopped at the house of J. C. JONES, stole a blanket, overcoat, quilt and shawl, and started to ride to Bloomington. Arriving at Lawndale, he found the Kickapoo too high to cross, and left the horse and proceeded forward on foot to Atlanta, where he was captured the following day with the stolen articles in his possession. Deputy Sheriff LARISON brought him back to Lincoln, where he had an examination, and was bound over in $500 bonds, which he was not able to furnish; and yesterday was brought here by Sheriff JACKSON, of Logan County, for safe-keeping.

Certain circumstances connected with the fellow, his manners and appearance, caused suspicion to be aroused that he was the "sole survivor," and, upon being confronted by Mr. CONGDON, of Lincoln, who was Deputy Warden of the Penitentiary in 1869, was identified as JOHN A. RIDSON, *alias* Clark, who at that time served a term for stealing a horse in LaSalle County. He, however, declared he knew nothing of the matter until he arrived here, when he acknowledged himself to be the man who has been playing the part of the "sole survivor;" and he has also been recognized by different parties who heard his account of the loss of the expedition a few days since.

MAJOR POWELL'S PARTY PERISHES IN THE COLORADO.

19 Drown. John Sumner Is The Sole Survivor.

THE POWELL PARTY.

How the Hoax Grew in the Hands of Sensation Mongers.

From the Denver (Colorado) News, July 6.

The Omaha *Republican* of the 21 and 2d inst. contains a very lengthy but rather unintelligible account of the disaster, which it obtained from Wm. RILEY, a trapper who has spent several years in the Rocky Mountains, and who had just arrived at Omaha over the Pacific Railroad. He says he met JOHN C. SUMNER at Fort Bridger, (no date given,) and from him learned the destruction of the party, of which he was the sole survivor.

The New York Times
July 13, 1869. Page 5.

FROM THE OUTSET of explorations on the Colorado River and its tributaries, whether by prospectors, trappers, or *bona fide* explorers, mishap and death were present. In 1869, while John Wesley Powell's government-supported expedition of exploration was descending the Green and Colorado Rivers, news came of the disastrous drowning of the entire party but one. Newspapers across the country reported the disaster—and the subsequent revelation of a hoax. Just as newsworthy was the arrest of the perpetrator, John A. Ridson, or Risdon, *alias* Miller, *alias* Clark, in Lincoln, Illinois—not for the hoax but as a horse thief and a petty thief.

Until recently, the rich historical resources of *The New York Times* were widely available, but only on microfilm, an example of which is shown here. Blemishes and poor reading quality were just as much due to rough treatment of the films as they were the quality of the original images. The advent of digital resources has allowed for significant improvements in the quality of reproductions. But readers should remember that for a good part of the 20th century this represented the ways and means of historical researchers.

Arlington National Cemetery

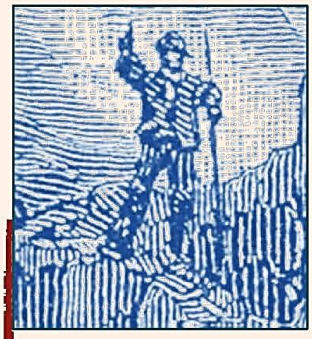
JOHN WESLEY POWELL — EMMA DEAN POWELL
AND
WILLIAM OWEN O'NEILL

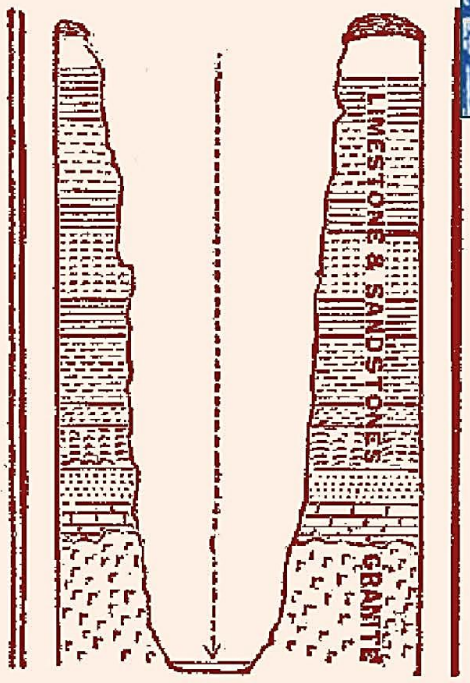
The final resting places of J. W. Powell (1834–1902) and his wife, Emma (1835–1924), and of "Buckey" O'Neill (1860–1898) are near each other in the original section of Arlington National Cemetery, in Arlington, Virginia. Major Powell was a wounded veteran of the Civil War; Captain O'Neill, one of Colonel Theodore Roosevelt's "Rough Riders" and once mayor of Prescott, Arizona, was killed in action at San Juan Hill, Cuba, during the Spanish–American War. Powell of course was the champion of the Colorado River. O'Neill was instrumental in early settling and development at Grand Canyon.

Photos by Earle E. Spamer
May 1997

John Wesley Powell Answers a Question from the Audience

'Yes indeed . . .





A SECTION OF COLORADO CANYON.

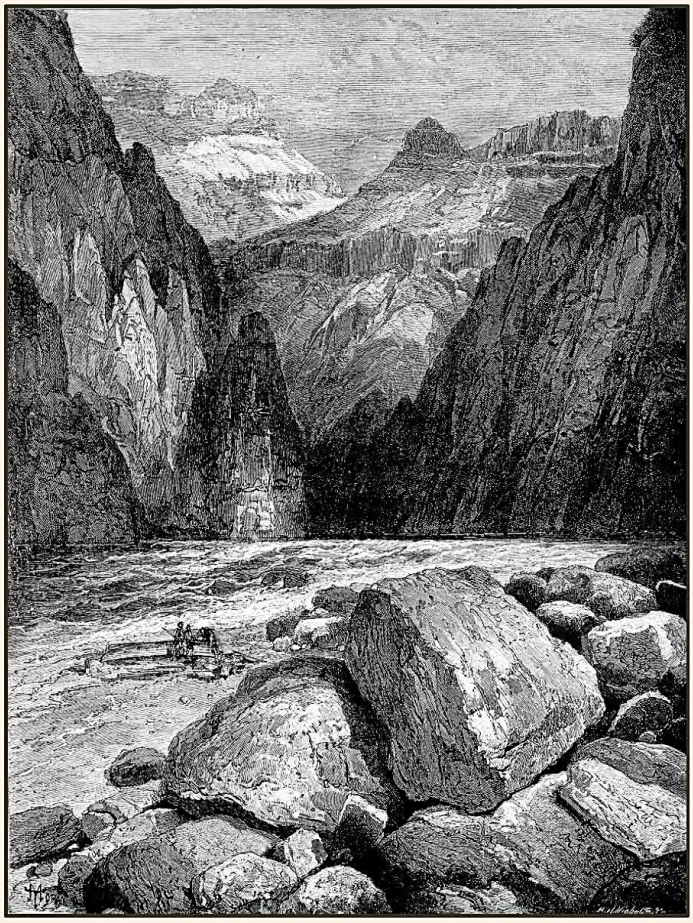
'had to dig it all out just to see the insides!'

With appreciation to Captain John Hance

(Top) "Climbing the Grand Cañon." Sketch by Thomas Moran. Engraving by F. S. King. John Wesley Powell, *Exploration of the Colorado River of the West and its Tributaries. Explored in 1869, 1870, 1871, and 1872, under the direction of the Secretary of the Smithsonian Institution* (U.S. Government Printing Office, Washington, 1875), Figure 34 *(detail)*.

(Bottom) "A Section of Colorado Canyon." Albert D. Richardson, *Beyond the Mississippi: From the Great River To the Great Ocean* (American Publishing Co., Hartford, Connecticut, 1867), p. 472. *(Adapted.)* The stratigraphic column portrayed here was taken from the seminal geological survey of Grand Canyon by John Strong Newberry, attached to the Ives expedition of 1858; a schematic rendering as viewed at Diamond Creek.

Row Away From the Rocks

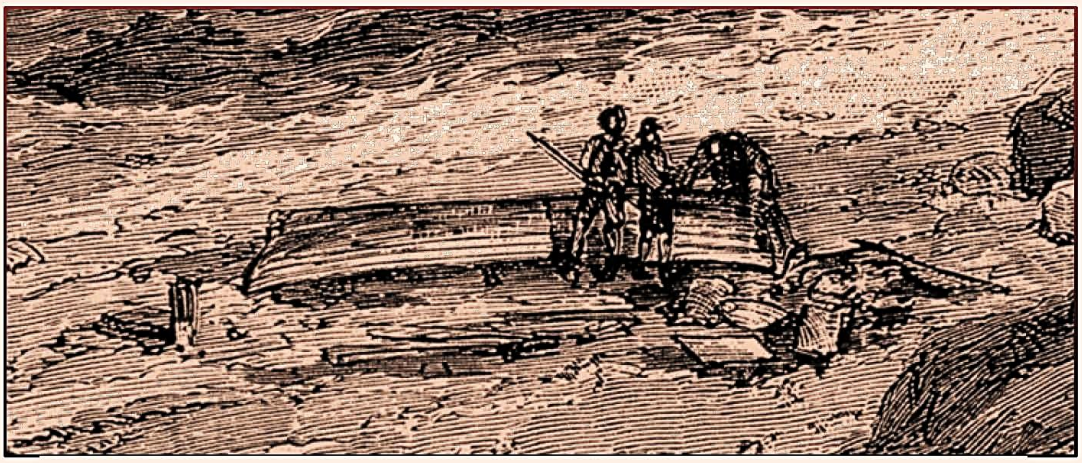


Always sage advice (and the title of a book cited in this bibliography), this scene of lonely corroboration from the Powell expedition is nearly lost in gray grandeur. While modern river guidebooks cannot serve for navigation in the ever-changing regime of water flow and shifting debris fields, they do function as guide posts, alerting river travelers of things to come—of which Powell's party, of course, had no idea on the 1869 Colorado. This was in fact the region where (some had heard) the river disappeared into subterranean passages, and death awaited foolish wayfarers.

"Granite Falls. – Kaibab Division. – Grand Cañon."

Sketch by Thomas Moran
Engraving by H. H. Nichols

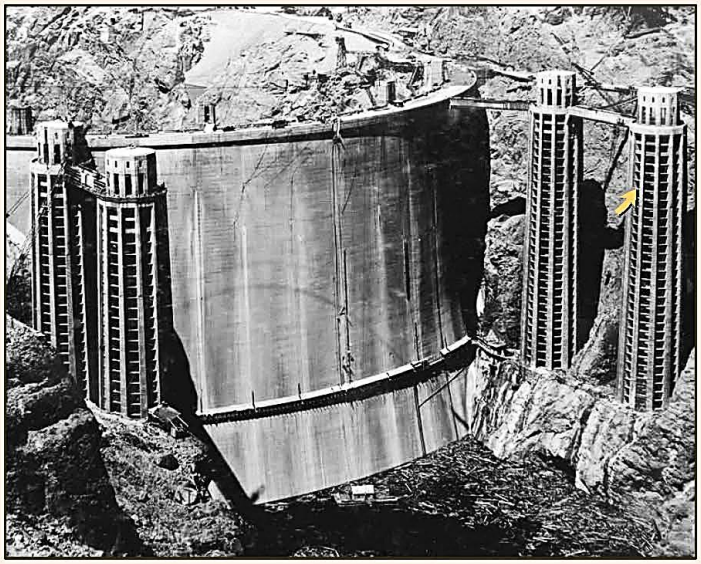
Clarence E. Dutton, *Tertiary History of the Grand Cañon District* (U.S. Geological Survey Monograph 2, 1882), Plate XXXI.

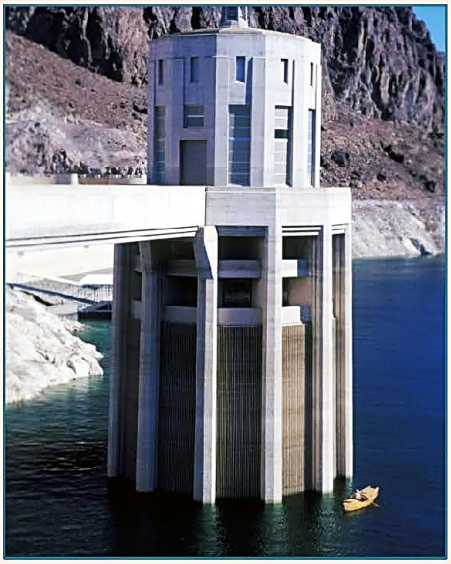


(Once) A Highway to the Sea

Aerial view of Hoover Dam in the Colorado River astride the boundary between Arizona (foreground) and Nevada, looking westward. Most clearly visible are the Arizona spillway (by the parking lot), the Arizona highway's snaking approach to the dam, and the four intake towers in Lake Mead. Also visible are the Bureau of Reclamation's visitors center (the white and copper-colored cylindrical structures on the far (Nevada) side. The Colorado River downstream is not visible from this vantage but the penstock outlet works on the Nevada wall can be seen near the base of the cliff.
(Photo 2 March 1998.)

All photos U.S. Bureau of Reclamation





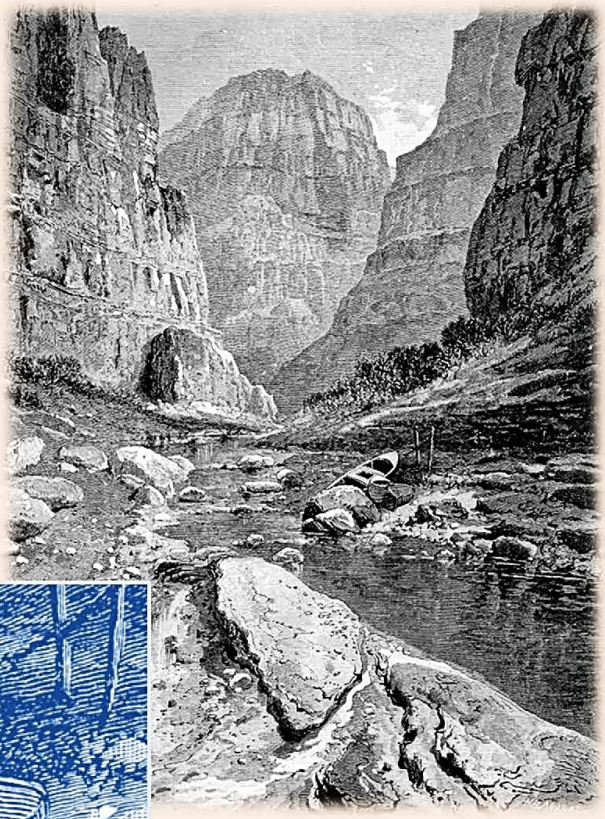
(Left) The nearly finished Hoover Dam and intake towers brood over a rising Lake Mead, 1935. Note the driftwood and construction debris ponded in slackwater beside the barge. (The location of the yellow arrow denotes the position of the boat in the photo at right.) [What is inside the intake tower? See overleaf of Part 12 title-sheet.]

(Right) On 19 June 2002* Brad Dimock rows past the upstream Nevada intake tower in his self-built replica of a boat used by Haldane "Buzz" Holmstrom, who in October and November 1937 had rowed the Green and Colorado Rivers all the way to the back of Hoover Dam. In 2002 Dimock retraced the Grand Canyon–Lake Mead leg of that trip and reenacted Holmstrom's historical physical bump against the dam, ending the journey. Dimock's approach to the dam was with permission and in the presence of Bureau of Reclamation personnel. With Vince Welch and Cort Conley, Dimock wrote a biography of Holmstrom, *The Doing of the Thing: The Brief Brilliant Whitewater Career of Buzz Holmstrom* (Fretwater Press, Flagstaff, 1998) [see Item no. 2.6802 herein].

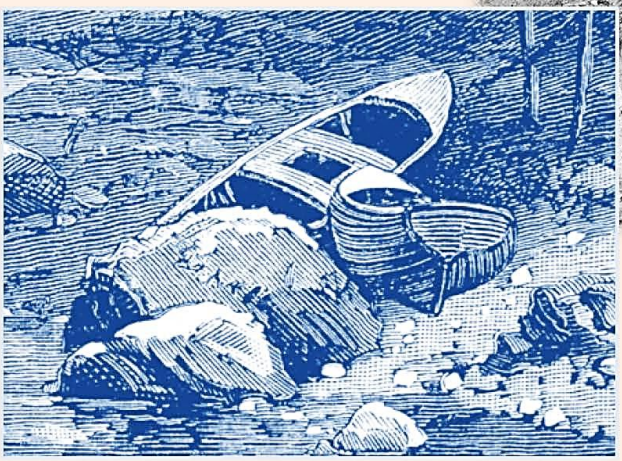
USBR photo by Andy Pernick, http://www.usbr.gov/lc/region/g5000/photolab/gallery_detail.cfm?PICIDTYPE=3942.
Access photo database at http://www.usbr.gov/lc/region/g5000/photolab/photostart.cfm *(last accessed 4 January 2012).*

* Date from Bureau of Reclamation photo database. Dimock recalls it was a couple of months later (*fide* Brad Dimock, 4 January 2012).

"Kanab Cañon. – Near the Junction."



Sketch by Thomas Moran
Engraving by H. H. Nichols



Clarence E. Dutton, *Tertiary History of the Grand Cañon District* (U.S. Geological Survey Monograph 2, 1882), Plate XXV.

Note in the enlarged inset that the engraver contributed some peculiar perspective to the one boat seen from aft; an improbable, Escheresque piece of boat building.

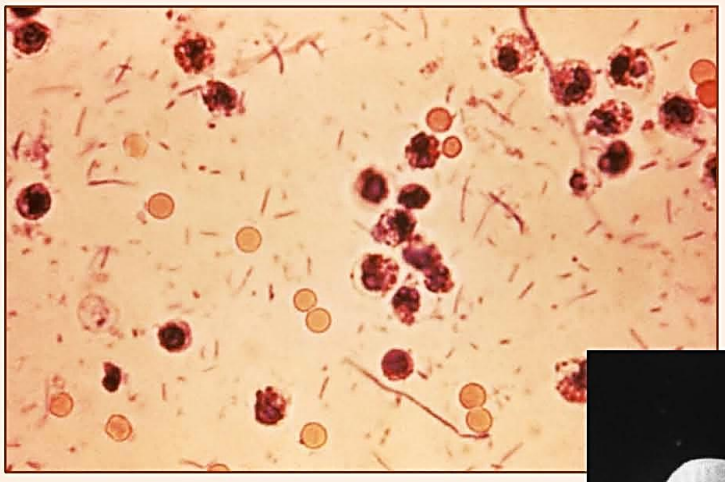
A symbolic view of journey's end for the second Powell expedition in 1872, the boats dragged part way into Kanab Creek from the Colorado River, emptied, and left to the elements and ages. But this was actually the *beginning* for thousands of journeys into Powell's "Great Unknown" of the Grand Canyon. His reports, publications, and lectures would fix the canyonlands and the Colorado River into the minds of geographers, legislators, citizens and adventurers the world over. A century later, Colorado River trips through Grand Canyon were reaching a point of crowding that the issue became the subject of studies on the sociological qualities of river trips and about group and human–environmental interactions along the river. These led as well to the creation of special-needs river trips, offered to individuals with physical, medical, or social concerns who otherwise may never have had — or imagined they could have — the experience of living in a near wilderness, participants on Powell's whitewater trail of adventure. And within the community of Colorado River boatmen also arose attention to emotional and general health concerns, with the establishment of The Whale Foundation offering these men and women assistance, support and education.

The title thus cited is: George T. Henry, [no date (1996)], *Row Away From the Rocks* (no imprint [Cedar Rapids, Iowa]), 92 pp. [Hardbound (limited ed.) and paperbound states.]

NOT WANTED!

INFAMOUS COLORADO RIVER RUNNERS

With an increase in the number of people running on the Colorado River through Grand Canyon during the later part of the 20th century, unexpected (and avoidable) outbreaks of intestinal illnesses were reported; if not with regularity then with some certainty due to the close quarters of river trips and casual attention to cleanliness. *Shigella* and *Giardia* are two kinds of infectious organisms that have been encountered on river trips, resulting usually in bouts of fever and diarrhea. Increased federal, state, and county agency oversight and training for boat crews of commercial river-running companies, and fastidious attention to clean food preparation and waste management during river trips, has reduced reported incidents of illness. ✚



(above) Photomicrograph of stool exudates from a patient with shigellosis or so-called "Shigella dysentery". The bacterium is *Shigella*, which many researchers today consider to be more properly related to *Escherichia*, of which *E. coli* is the most commonly recognized in public venues.

(right) Scanning electron microscope image of *Giardia lamblia*, a flagellated protozoan parasite that lives in the intestines of infected animals, including humans, before being passed back into the environment to reinfect another host.

(Images: *U.S. Department of Health and Human Services, Center for Disease Control and Prevention, Public Health Image Library)*

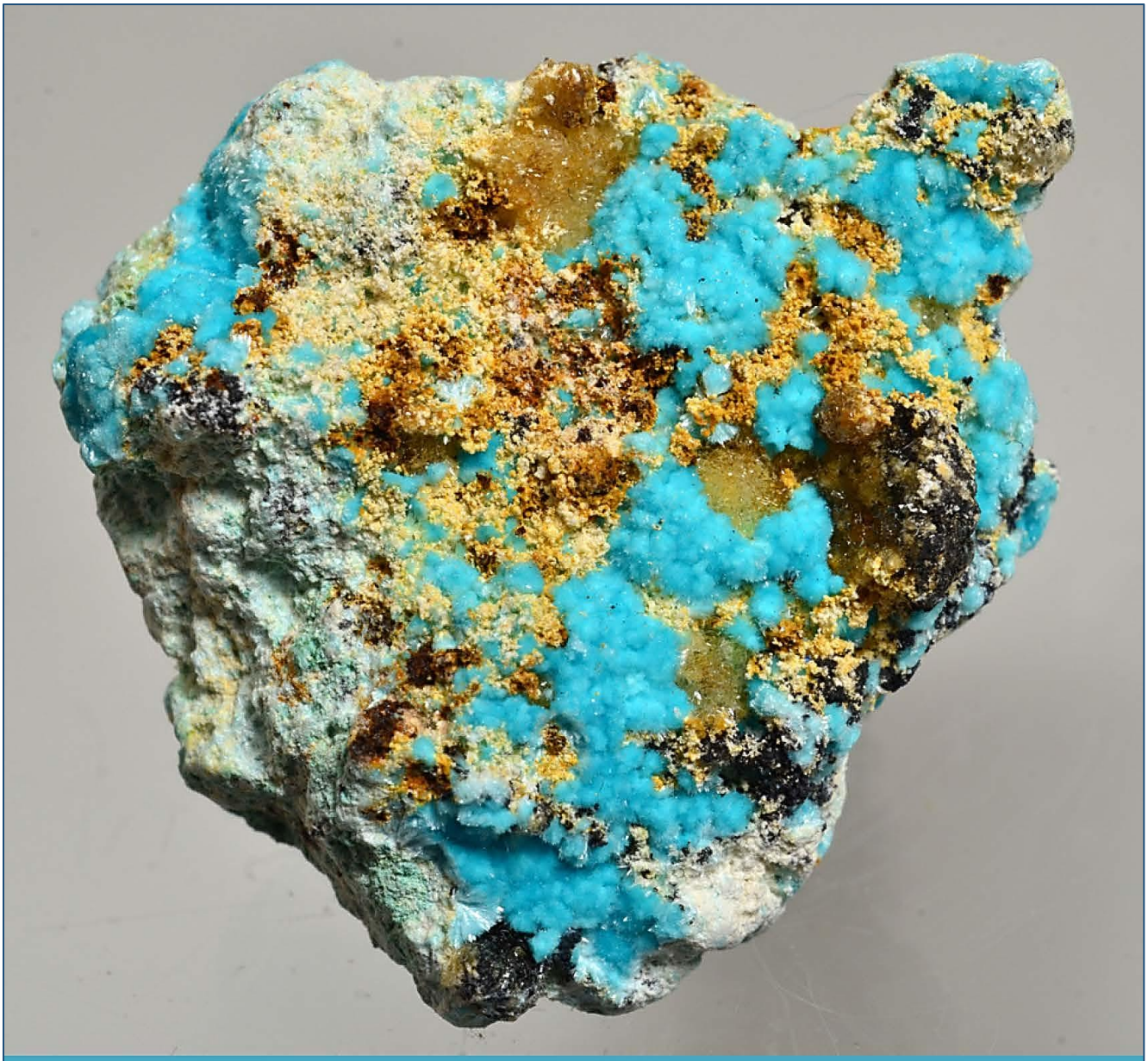
▲ TREAT YOUR WATER – WASH YOUR HANDS ▲

... but what if the wildlife approaches and feeds itself?

At "Grand Canyon West", the touristy attraction on the Hualapai Indian Reservation, visitors at Guano Point are offered a "barbeque" lunch. When we seated at a lone picnic table on the rim away from the crowd, this butterfly immediately flew in and, without so much as hovering, set down to feed from the plate.

(Earle Spamer photo, 3 October 2007)

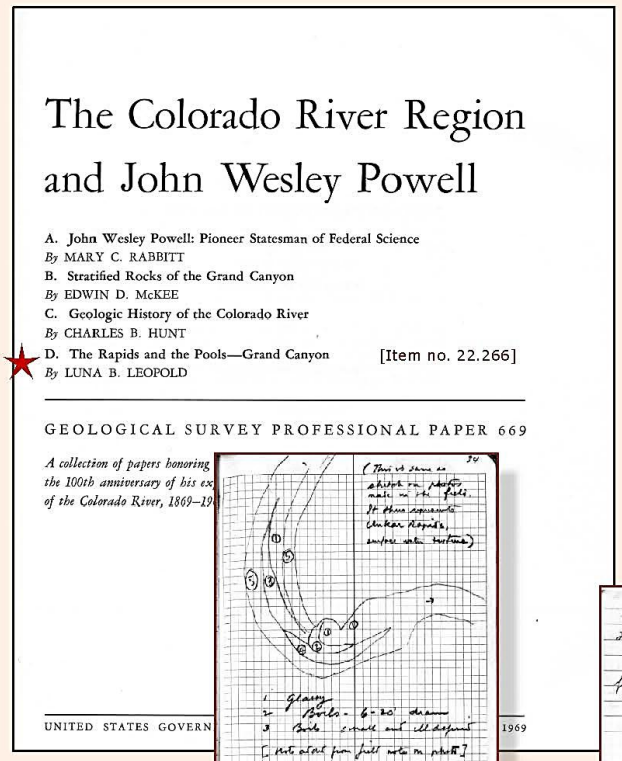
(right) An instructional sign at Grand Canyon National Park, on the rim outside Bright Angel Lodge, a long-time feeding "trouble spot" due largely to the abundance of rock squirrels. *(Earle Spamer photo, 6 October 2007)*



GRANDVIEWITE

This mineral was first described from a specimen from the Last Chance Mine on the Grandview Trail, Grand Canyon (see Item no. 21.4820). It occurs as a secondary mineral to copper, which was the principal ore mined from the Last Chance prospect. Oddly enough, grandviewite was not recognized until 2008 and was first published in the *Australian Journal of Mineralogy*. It has very delicate radial crystals (seen more massively in this specimen), and the mineral is very soft, with a hardness of 2 on the one-to-ten Moh's Scale. This specimen is in the Grand Canyon National Park Museum collections.

(National Park Service, Grand Canyon National Park)



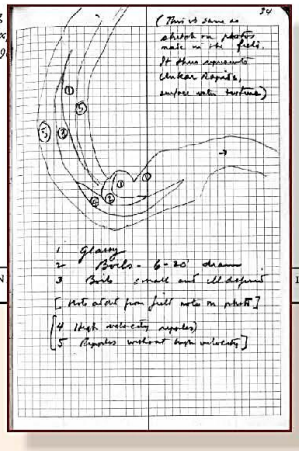
The Colorado River Region
and John Wesley Powell

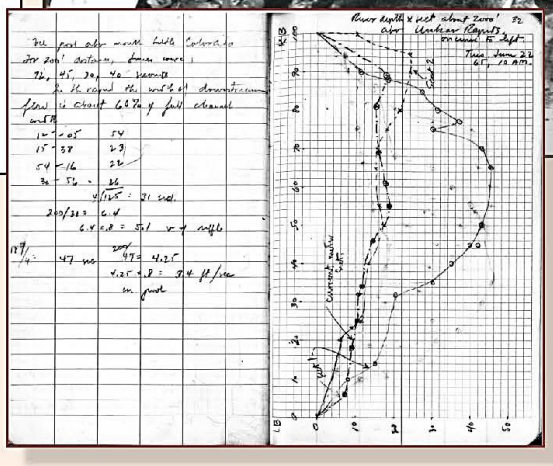
A. John Wesley Powell: Pioneer Statesman of Federal Science
By MARY C. RABBITT
B. Stratified Rocks of the Grand Canyon
By EDWIN D. McKEE
C. Geologic History of the Colorado River
By CHARLES B. HUNT
D. The Rapids and the Pools—Grand Canyon [Item no. 22.266]
By LUNA B. LEOPOLD

GEOLOGICAL SURVEY PROFESSIONAL PAPER 669

A collection of papers honoring the 100th anniversary of his ex of the Colorado River, 1869–19

UNITED STATES GOVERN 1969





The Rapids and the Pools

"It was just above Unkar Rapids that I decided to make a cross profile and velocity measurements. To record boat position one man on board held a stadia rod and I set up plane table and alidade on the right bank. Thus I could short distance by stadia. We had trouble getting the electrical system through the current meter cable—again a problem of being furnished old and decrepit gear from a local [U.S. Geological] Survey office. I vowed we would get a new reel and cable dropped to us by parachute.

"Smuss [Sylvester Allen] ran the boat—it was all he could do to keep the boat holding its own against the current even with the motor roaring at wide open throttle. Depth readings were obtained by cable and weight and a bed velocity recorded as well as surface velocity. Interestingly both at the bed and at the surface the readings were the same! 11.5 feet per second. This tells me something about what must happen in a big rapid. The main current must keep plunging downward as it comes off the lip of the shallow rapid, and creates strong bed current."

* * * * *

[Farther downstream] "The De Haviland came over early, and above camp we climbed out on a set of minor hills where the parachute drops were to be made. There were 4 drops— the one with a case of beer the parachute failed to open. Half the cans were wrecked on the rocks. So also the lettuce arrived self shredded from the free fall. A new reel and cable for the current meter landed safely." (Leopold, *Journal*, Vol. 7.)

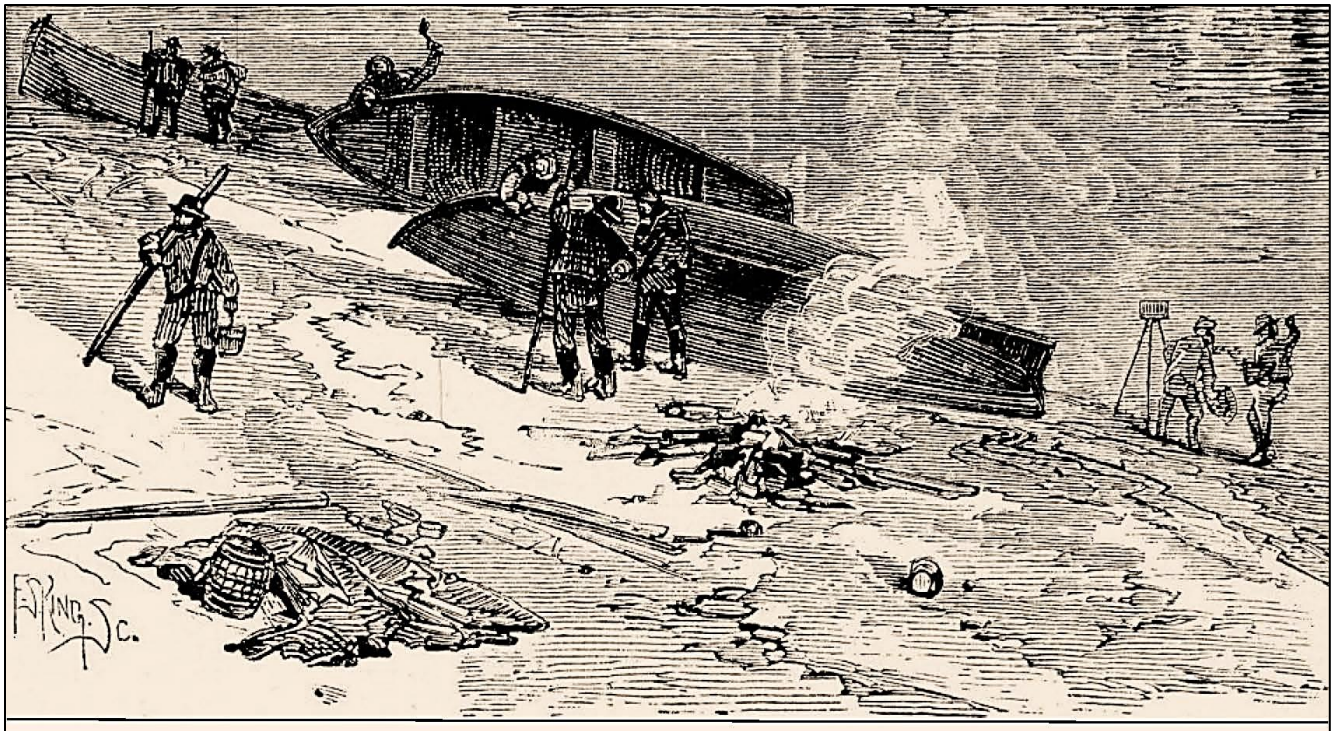
Luna Bergere Leopold (1915-2006), a son of prominent conservationist Aldo Leopold (1887-1948), worked during seven decades to bring the field of hydrology and fluvial geomorphology into the conscience of urban planners and those who would restructure the flow of rivers and streams. He surveyed the Colorado River after the closing of Glen Canyon Dam, traversing Grand Canyon in 1965. From this work he was the first to scientifically analyze the hydrology of Grand Canyon's rapids [*see title-page at top left*]. ***Shown above*** are a photo of Leopold surveying above Unkar Rapid, which serves as a frontispiece to Vol. 7 of his manuscript *Journal*; pages depicting the Unkar survey data from Vol. 37 of his field notes; and a corresponding passage quoted from his *Journal*; all from his papers in the American Philosophical Society, Philadelphia. *(American Philosophical Society, Luna Bergere Leopold Papers)*

(top left) *The Grand Cañon of Arizona; Through the Stereoscope; The Underwood Patent Map System Combined with Eighteen Original Stereoscopic Photographs* (Underwood and Underwood, New York, London, Ottawa (Kansas), San Francisco, Toronto, and Bombay, 1904), 18 stereoviews in slipcase, text 64 pp. [by Frederick S. Dellenbaugh], 2 maps (map 2 is fold-out).

(top right) *Fifty-six Scenes of the Grand Canyon of Arizona in Three Dimension Photography. Fred Harvey* (Tru-Vue, Inc., Rock Island, Illinois, no date), four reels of filmstrips and Tru-Vue viewer, boxed.

(bottom right) *The World Parade; Grand Canyon* (Castle Films, Inc., no date), 16-mm Headline Edition film, black-and-white, no sound, no. 238.

(bottom left) *Grand Canyon Nat'l Park; East Rim Drive; Arizona* (Sawyer's, Portland, Oregon, no date), View-Master, 7 More Wonders of the World series, no. 29. [Rotary color stereoscopic view reel and sleeve, and View-Master viewer shown.]



HOLD IT!

At last we reach a huge pile of drift wood. Our rolls of blankets, two guns, and a barometer were in the open compartment of the boat, and, when it went over, these were thrown out. The guns and barometer are lost, but I succeeded in catching one of the rolls of blankets, as it drifted by, when we were swimming to shore; the other two are lost, and sometimes hereafter we may sleep cold.

A huge fire is built on the bank, our clothing is spread to dry, and then from the drift logs we select one from which we think oars can be made, and the remainder of the day is spent in sawing them out.

John Wesley Powell, *Exploration of the Colorado River of the West and Its Tributaries* (Government Printing Office, Washington, 1875), p. 49.

An illustration from the second Powell expedition down the Green and Colorado Rivers. (We know it portrays the second expedition because of the camera present *[right]*.) Powell's memoir, however, was written as though it was from the first expedition, in 1869; and it has never been satisfactorily explained why he so ignored the travels, and members, of the second river trip of 1871 and 1872.)

What even greater views might we imagine today from the second expedition, had convenient photographic methods been available in 1872 rather than the cumbersome, balky, and technical methods of wet-plate photography. Although the legend for this illustration captures the scene of a major geographical feature along the Green River in Utah, the artist portrays in secondary detail the repairing of boats and camp activities.

"Gunnison's Butte at the foot of Gray Cañon." Engraving by F. S. King. John Wesley Powell, *Exploration of the Colorado River of the West and Its Tributaries* (Government Printing Office, Washington, 1875), Figure 18 *(detail)*.

Adair, E. A.
1892 A trip to the Grand Canyon. Juvenile Instructor, 27:582.

Adams, Ansel
1974 Images 1923-1974. Boston: New York Graphic Society, 128 pp. (see "Grand Canyon of the Colorado River. c. 1942,"
p. 61).
1976 Photographs of the Southwest; selected photographs made from 1928 to 1968 in Arizona, California,
Colorado, New Mexico, Texas and Utah, with a statement by the photographer, and An essay on the land, by L.
C. Powell. Boston: New York Graphic Society, 128 pp.
Adams, H. C.
1921 Grand Canyon bridge. Natl. Geographic Mag., 39:644-650.

Adams, Samuel
1870 . . . Communication from Captain Samuel Adams relative to the exploration of the Colorado River and
its tributaries. U.S. House of Representatives, 41st Congress, 3rd Session, Miscellaneous Document 12, 20 pp.; to accompany bill H. R.
2565.
1888 Report of Captain Samuel Adams to the War Department. Vedette, 9:4-7.

Ahrendt, Bill
1988 Steamboats on the Colorado. Arizona Highways, 64(7):17-19. (Eighth in
historical paintings by Bill Ahrendt.)

Aitchison, Stewart, and Grubbs, Bruce
See Special Section 1.

Alarc¢n, Hernando
1556 Relatione della Navigatione & scoperta che
ordine dello Illustrissimo Signor Don
Antonio di Mendozza Vice Re della nuoua Spagna, dat
Ramusio, Giovanni Batista, Terzo
volvume delle navigationi et viaggi. Venice: folios
1600 The relation of the nauigation and discouery
order of the right honourable Lord
Don Antonio di Mendo‡a vizroy of New Spaine, dated in
Hakluyt, Richard, The principle
naviations, voiages, traffiqves and discoueries of the
also reprinted in Hakluyt Society
Publications, Glasgow, Extra Series, 9:279-318 [1904].

Albright, Horace M.
See Special Section 1.

Albright, Horace M., and Taylor, F. J.
1937 "Oh, Ranger!" New York: Dodd, Mead and Co., 272
1972 "Oh, Ranger!" Riverside, Conn.: Chatham Press, [illegible], National Park Service Centennial Edition, 239 pp.

Albright, Horace M.; Dickenson, Russell E.; and Mott, William Penn, Jr.
1987 National Park Service; the story behind the scenery (Moore, Mary Lu, ed.). Las Vegas, Nev.: KC Publications, Inc., 96 pp.

An extract directly from the ASCII-format digital version of the 2nd edition of *Bibliography of the Grand Canyon and the Lower Colorado River* (Grand Canyon Natural History Association Monograph 8, 1990). The display here mimics that of an old monochrome, green-phosphor computer monitor. A number of diskettes were produced in addition to the loose-leaf inkprint and microfiche versions, specifically targeted to libraries that then were in the midst of the brief enthusiasm for space-saving, searchable digital files. The digital version was indeed searchable, but only one part of the bibliography at a time. While the format was inherrently useful, an unaesthetic on-screen layout, the loss of italicization, and minor bumps such as rough breaks and characters with diacritical marks being substituted with odd symbols — and the fading enthusiasm for such products — all contributed to a meager distribution of the disk-based product. **Inset:** One of the set of five 5¼-inch diskettes, 1990 ed.

The Guide is the informational newspaper distributed to all visitors to Grand Canyon National Park, published by the National Park Service with the cooperation of the Grand Canyon Association, the park's not-for-profit partner. The various editions serve a diverse profile of the visiting public; those shown here are *(clockwise from upper left)* in English, Spanish, Korean, Japanese, Italian, German, French, and Chinese. *The Guide* has been distributed under various names and mastheads and in various formats. These smaller-format, paper-saving versions are from 2009; today *The Guide* is also available as PDF downloads. The linguistic diversity is a reflection of the widespread, international recognition and popularity of the Grand Canyon.

Commemorative insignia manufactured aboard the U.S.S. *Grand Canyon* (AD 28, AR 28)

brass, and brass on wood
diameter 6½ inches
weight approx. 4 pounds

U.S.S. *Grand Canyon* was the only naval vessel named for the Grand Canyon. She was built as a Shenandoah class destroyer tender (designation AD 28) and later was reclassified a repair vessel (AR 28)

commissioned 5 April 1946
decommissioned 1 September 1978
sold for scrapping June 1980

Commemorative insignia such as these were made aboard many naval vessels, given to crew members and visiting dignitaries. Most were fashioned of plaster, but U.S.S. *Grand Canyon*, a repair and manufactory vessel, had its own foundry, thus the crew had the means to cast brass insignia. As such, brass medallions are met much less frequently among these kinds of naval memorabilia. (It is not known whether the wooden plaque on which the AR 28 medallion is mounted, *right*, was original or added later.)

(Author's collection)

Moving Fish Then . . .

The artificial stocking of trout into perennial streams of the Grand Canyon was an early effort to establish and promote fisheries. This view shows a park ranger on the Clear Creek Trail with canisters of trout fry. The effort was repeated when flash floods swept populations away. Today, the trout of side streams of the canyon are considered an invasive species not naturally belonging in the national park. In the mainstem Colorado River, however, trout populations survive from individuals that are stocked in the "Lees Ferry" reach of the river between Glen Canyon Dam and Lees Ferry, within the Glen Canyon National Recreation Area, where a recreational fishery is widely promoted.

(Photos from National Park Service, Grand Canyon National Park)

. . . and Now

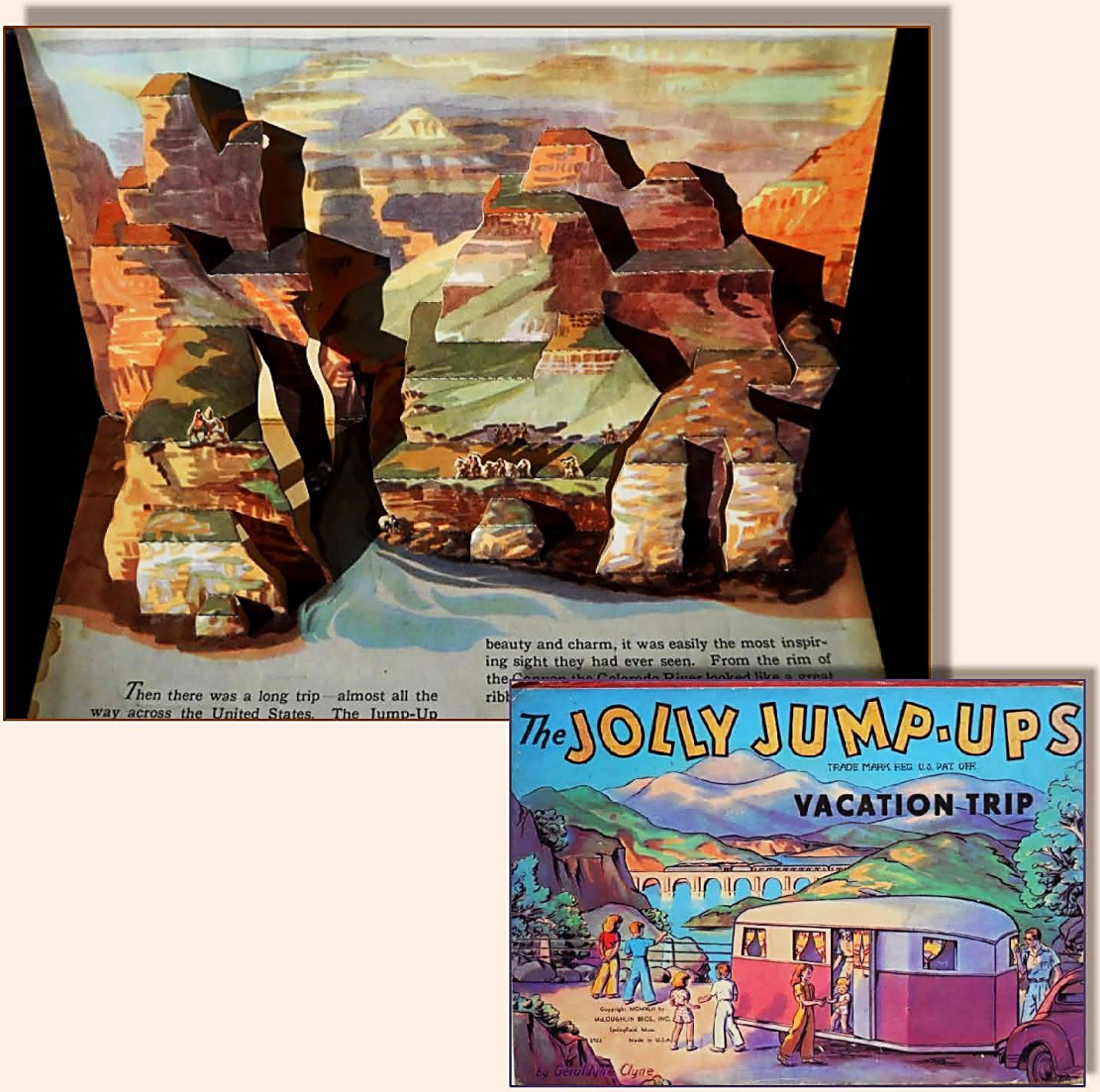
The humpback chub is an endangered fish that once was widespread in the Colorado River. Since the building of Glen Canyon Dam, the physical conditions favored by the chubs have reduced their populations in Grand Canyon, where now it is chiefly resident in the perennial portion of the Little Colorado River. Recent efforts have been underway to translocate chubs to favorable locales elsewhere in Grand Canyon; particularly Shinumo and Havasu Creeks. This photo was taken on 23 June 2010 when a second spawning group was taken to Shinumo Creek. The photo description notes further, "Prior to the translocation, a 13-person crew led by [Grand Canyon National Park] fisheries biologist Brian Healy spent six days surveying the translocation reaches of Shinumo Creek to get population estimates of [previously placed] humpback chub and other native fish, and removing nonnative rainbow trout."

Computers and the Web on the Colorado River

In 1923, radio was an experimental novelty on a Colorado River trip through Grand Canyon. U.S. Geological Survey damsite surveyors kept in touch with the outside world, even learning of the death of President Warren G. Harding while in Marble Canyon, hence the naming of President Harding Rapid. Some six decades later, after personal computers were developed, it was reasonable to expect that they, too, would be useful tools even at the bottom of the Grand Canyon, despite some early technological limitations. By the turn to the 21st century, satellite communications made even routine web "chats" possible during river trips; and more computers were available that could withstand punishing treatment.

This photo taken on the evening of 30 May 1994 shows Alan Haden of the Glen Canyon Environmental Studies project sitting aboard his boat with a laptop computer, collating data gathered during the day's work. Surely this was among the earliest computers ever to be used on the Colorado River in Grand Canyon. This science trip collected data during a controlled steady flow of water from Glen Canyon Dam. The study investigated "photosynthetically available radiation", the amount of sunlight that reaches specific depths, and how the dam-controlled regime of the river may affect the production of plant food resources for Colorado River organisms.

(Earle Spamer photo, Tuckup Canyon, Colorado River Mile 165)



One of the joys of young-reader products is whimsy. One might be hard pressed to conceive how a three-dimensional "pop-up" Grand Canyon could be created on paper, yet here it is in Geraldyne Clyne's 1942 gem, *The Jolly Jump-Ups Vacation Trip*. When the panel is opened, even the mounted trail groups pop up in relief as they weave their ways down Grand Canyon-scale pyramid blocks, and the Colorado River winds into the deep shadows of the Great Unknown. While the timing of the theme of vacation touring was inopportune, with the coming of war-time rationing and curtailed travel, one may see a few moments of reflection in an adult reading the stories to a child. On the other hand, one may also imagine a child's more immediate frustration when a little brother or sister's eager hands grasp hold of the delicate paper pop-ups!

Geraldyne Clyne, *The Jolly Jump-Ups Vacation Trip* (McLoughlin Brothers, Inc., Springfield, Massachusetts, 1942), [12] pp. [6 pop-up stories with text on boards].

Alexander von Humboldt

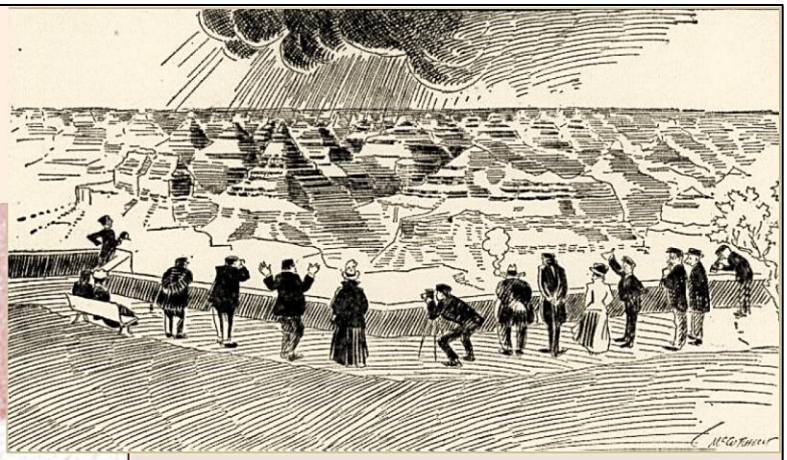
The One Writer Who *Should* Have Seen the Grand Canyon

Around the turn to the 19th century, the Prussian polymath and explorer Friedrich Wilhelm Heinrich Alexander von Humboldt (1769–1859) traveled extensively in South and Central America and the Caribbean, then visited Washington and Philadelphia with triumphal celebrations in 1804. He had circled through the Mexican interior in 1803 and, although having not traveled farther north, he included in his writings notes on the geography of the American Southwest. Probably no other scientific explorer of his day was more qualified to appreciate the landscapes that he would have encountered had his journeys gone into the northern hinterlands of old New Spain.

Portrait Alexander von Humboldt, *Cosmos: A Sketch of a Physical Description of the Universe,* Translated from the German by E. C. Otte (Bell and Daldy, London, 1871), Vol. I, *frontispiece*. (*Kosmos*, in the original German, was first published in 1845–1847, passed through new editions, and has been widely reprinted and translated.)

Signature Humboldt to Giovanni Fabbroni, 17 August 1816. *(American Philosophical Society)*

TIMELESS



1882 **"The Transept, Kaibab Division, Grand Cañon**
An Amphitheater of the Second Order"
Thomas Moran *in* Clarence E. Dutton, *Atlas to Accompany the Monograph on the Tertiary History of the Grand Cañon District* (U.S. Geological Survey, Monograph 2, Atlas, 1882), Sheet XVIII *(detail, tinted here)*. (Julius Bien and Co., Lithographers, New York)

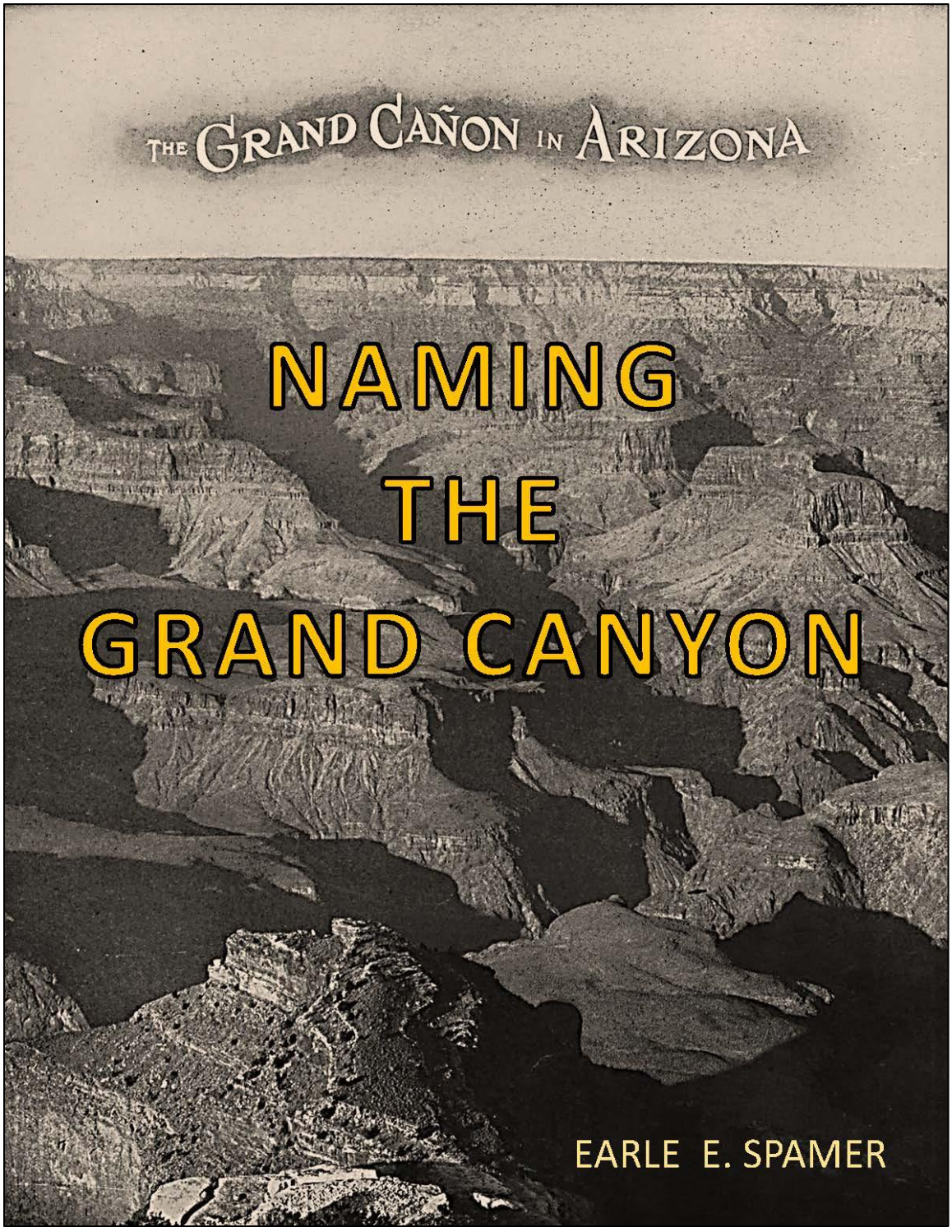
1909 **"In Silent Contemplation"**
John T. McCutcheon, "Doing the Grand Canyon"
Appleton's Magazine, Vol. 13 (1909), p. 642

1984 **Jeannette Spamer, Grand Canyon** *(Earle Spamer photo)*

Introducing the Grand Canyon is presented in the memory of my mother, Jeannette L. Spamer (1920–1987). I had previously dedicated the English translation of Sven Hedin's *Grand Canyon* (Chapter 7 herein) to her, complementing Hedin's own dedication in 1925 to the memory of his mother. But *Introducing* much further reflects her influence on me. When I was very young she took me to the library, and she taught me to read as well. That's how things started. The photo on the facing page, lower right, shows her at the Powell Memorial in October 1984. It was her only trip to the Grand Canyon; but my sister, Carol, and I had to share it with her.

Long before I became ensnared in libraries where I pursued research in science and history and eventually became a professional archivist, bibliographer, editor, and author, I had surrounded myself with books already. Once, my mother asked, "Don't you have enough books?" I had no answer; but now I do. No, Mom — this is the result of those trips to the library. Thank you!

Earle


THE GRAND CAÑON IN ARIZONA
NAMING
THE
GRAND CANYON
EARLE E. SPAMER

CHAPTER 2

NAMING THE GRAND CANYON (2024)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2024/12/Naming-GC.pdf (3 MB, 48 pp.)

ABSTRACT

THE ORIGIN of the name "Grand Canyon" is unknown. It was not the neological invention of John Wesley Powell in 1869, as is often retold. Earlier in the 19th century it was known as "Big Canyon" and "Great Canyon," perhaps the translation of the term by which French-speaking mountain men may have described it—*un grand cañon*. Both appellations inattentively survived the coming of "Grand Canyon," but only for a couple of decades. The earliest known non-Indigenous term, *Puerto de Bucareli*, was conferred in the diary of the Franciscan friar Francisco Garcés when he visited the Havasupai people in 1776, the first non-Native person known to have reached the Grand Canyon since a party of Spanish conquistadores arrived on the rim 236 years earlier, in 1540 (who are not recorded as having given it a name). Ingenious misspellings of the *puerto* appeared on manuscript and printed maps in the 18th and 19th centuries but its association as Garcés's mountain pass for the Colorado River was never remembered, nor did it label an entire canyon. The origins for each "Canyon" name, though, remain mysteries, including the first known appearance of "Grand Canyon" in 1857 that disappointingly lacked an admission of neologism or credit to another source. This has not dissuaded travelers and writers from exploiting the name for other landscapes around the world or from exercising it in a superfluity of analogies and metaphors. In the end, an answer to the question, "Who named the Grand Canyon?" may be unessential, given that Native peoples have had words from time immemorial that affirm long spiritual and cultural associations with the canyon.

INTRODUCTION

FOR NEARLY a century, a variety of historical reviews and opinion pieces have brought forward a changing narrative on the specific question, "Who named the Grand Canyon?" There should have been an easy answer, and for a while it seemed that there was, but it wasn't so. The following publications—all referred to and cited throughout the present study —are those that relayed the record through the incremental stages of devotion, denial, and discovery, only to end with a shrug of the shoulders. Each of them contain more detailed

information for their positions. Readers with the time or persistence should examine them through—in order—to appreciate the intricacies behind the present documented but summary work, which, brought up to date, introduces its own facts and assessments, too.

1933 Frederick S. Dellenbaugh, "Naming the Grand Canyon," *Science*, new series, Vol. 77 (April 7), pp. 349-350.

1968 O. Dock Marston, "Who Named the Grand Canyon?" *Pacific Historian*, Vol. 12, no. 3 (Summer), pp. 4-8.

1997 Earle Spamer, "The Canyon Grand By Any Other Name", *Nature Notes* (Grand Canyon National Park), Vol. 13, no. 1 (Spring), pp. 7-9.

2013 Earle Spamer, "Once Again, 'Who Named the Grand Canyon?'—and Other Obscure Grand Canyon 'Firsts'." *The Ol' Pioneer*, Vol. 24, no. 2 (Spring), pp. 4-16.

2018 Earle Spamer, "Connections: It's Always Who You Know and What You Hear," American Philosophical Society Library blog (April 20, 2018), https://www.amphilsoc.org/blog/connections-its-always-who-you-know-and-what-you-hear; last accessed November 29, 2024.

2018 Earle Spamer, "An Ill Wind Blows: Did John Wesley Powell Claim Jump the Grand Canyon?" *Boatman's Quarterly Review* (Grand Canyon River Guides, Flagstaff, Arizona), Vol. 31, no. 2 (Summer), pp. 10-12.

2022 Earle Spamer, "Big Canyon, Great Canyon, Grand Canyon: The Mysterious Evolution of a Name", *The Ol' Pioneer* (Journal of the Grand Canyon Historical Society), Vol. 33, no. 1 (Winter), pp. 8-18.

That most of these are my own publications indicates only infatuation and persistence in my personal attention to the Grand Canyon's interthreading histories and worldwide publications. They also demonstrate that the field was pretty much static after Dock Marston put to rest the long-standing contention that the geologist, ethnologist, and explorer John Wesley Powell was the one who named Grand Canyon, although Marston's work seems to have not received as wide attention as it should have. But quite a lot more evidence still lay buried in the pages and maps turned out during and before Powell's time, evidence that, once recovered, led in new directions to the greater question, apparently not asked, "How many names has the Grand Canyon?"

The influences that have driven me likewise led me into professional work in a broad variety of scholarly research collections, from which I learned to apply the academic techniques and resources to my studies (in their sixth decade now) of the Grand Canyon and the Colorado River. *Naming the Grand*

Canyon is the record of the Grand Canyon's nomenclature and a synopsis of its wide-ranging literary influences, as of 2024. I hope that others may now discover more information that can productively supersede this work.

The text illustrated in *Figure 1* was a turning point in the literary and cartographical explorations that have guided this study. It is by far the earliest known publication of the name "Grand Canyon," one that unambiguously locates the canyon, too. It appears in 1857 as a footnote on page 97 of Lorin Blodget's substantial work, *Climatology of the United States*.[2] Blodget *(Figure 2)* did not claim he named the Grand Canyon, nor did he give other credit for it (Sitgreaves had only called it "the great cañon"). Yet why is John Wesley Powell still so often indorsed as the one who named the Grand Canyon in 1869?

The story is more involved than certifying the first use of a name. To appreciate the Grand Canyon's unfixed nomenclatural footing, we must go first to 1540, then ahead to 1776 and eventually to 1869 and today. The information marshaled here traces historical trajectories for what is now practically a trademark, to corroborate that J. W. Powell did not coin the name, and, however unsatisfactory it may be in the end, to substantiate the position that we may never know who extemporized the name "Grand Canyon."

Sitgreaves (*Report of Exploration of Zuni and Colorado Rivers*, 1851) describes the gorges and cañons of the Colorado as very formidable at the 35th parallel, and in several cases below this point, and gives figures of some of them. The *Grand Cañon of the Colorado* as known to trappers and hunters, though not yet visited by scientific engineers, is placed by Sitgreaves in lat. 36°.

Figure 1

[2] Lorin Blodget, *Climatology of the United States, and of the Temperate Latitudes of the North American Continent* (J. B. Lippincott and Co., Philadelphia, and Trübner and Co., London, 1857).

Blodget's reference to Sitgreaves refers to the U.S. Army expedition led by Lt. Lorenzo Sitgreaves in 1851 across the northern tier of New Mexico Territory. The report was published two years later: L. Sitgreaves, *Report of an Expedition Down the Zuñi and Colorado Rivers* (Robert Armstrong, Public Printer; 32nd Congress, 2nd Session, Senate Executive Document 59, 1853, with map). The Colorado River is also mentioned on Blodget's p. 92.

The volume, royal octavo containing fold-out charts with colored ink, was available by subscription in the U.S. and England. It was noted as "Just Published" in a Lippincott advertisement on July 18 (*American Publishers' Circular and Literary Gazette*, Vol. 3, no. 29, p. 463). The volume sold for $5.00 and for 28s in the U.K.; an inflationary rate to the present day is equal to about $180.

Figure 2

Lorin Blodget (1823–1901)

Detail from one of two large-format posed professional photographs by the Gilbert & Bacon studio, taken in Blodget's study at 1324 South Broad Street, Philadelphia; presented in 1900 to the American Philosophical Society, also in Philadelphia, to which he had been elected a member in 1872.

(American Philosophical Society, M42.27.34)

A statistician and climatologist, Blodget is an unlikely player in the hunt for who named the Grand Canyon. Other than his brief footnoted reference in 1857 to the reconnoitering expedition led six years earlier by Lt. Lorenzo Sitgreaves, wherein he inserted the first known appearance of the term *Grand Cañon of the Colorado* [*Figure 1 herein*], he apparently had no other interactions on the subject.

In 1851, Blodget was hired by the Smithsonian Institution to compile and make sense of the meteorological data that were being gathered from all quarters. By most accounts he was brilliant, capable, and self-assured of his work. He kept his scientific colleagues apprised of his analyses, delivering three papers to the 1853 meeting of the American Association for the Advancement of Science, which he attended in Cleveland, Ohio, with his superior, Joseph Henry, the Smithsonian's first and long-serving Secretary (that is, director), himself a physicist and inventor. But Henry later revealed, "to my surprise I found that Mr. Blodget had entered all the papers on Meteorology entirely in his own name without mentioning the Smithsonian Institution."

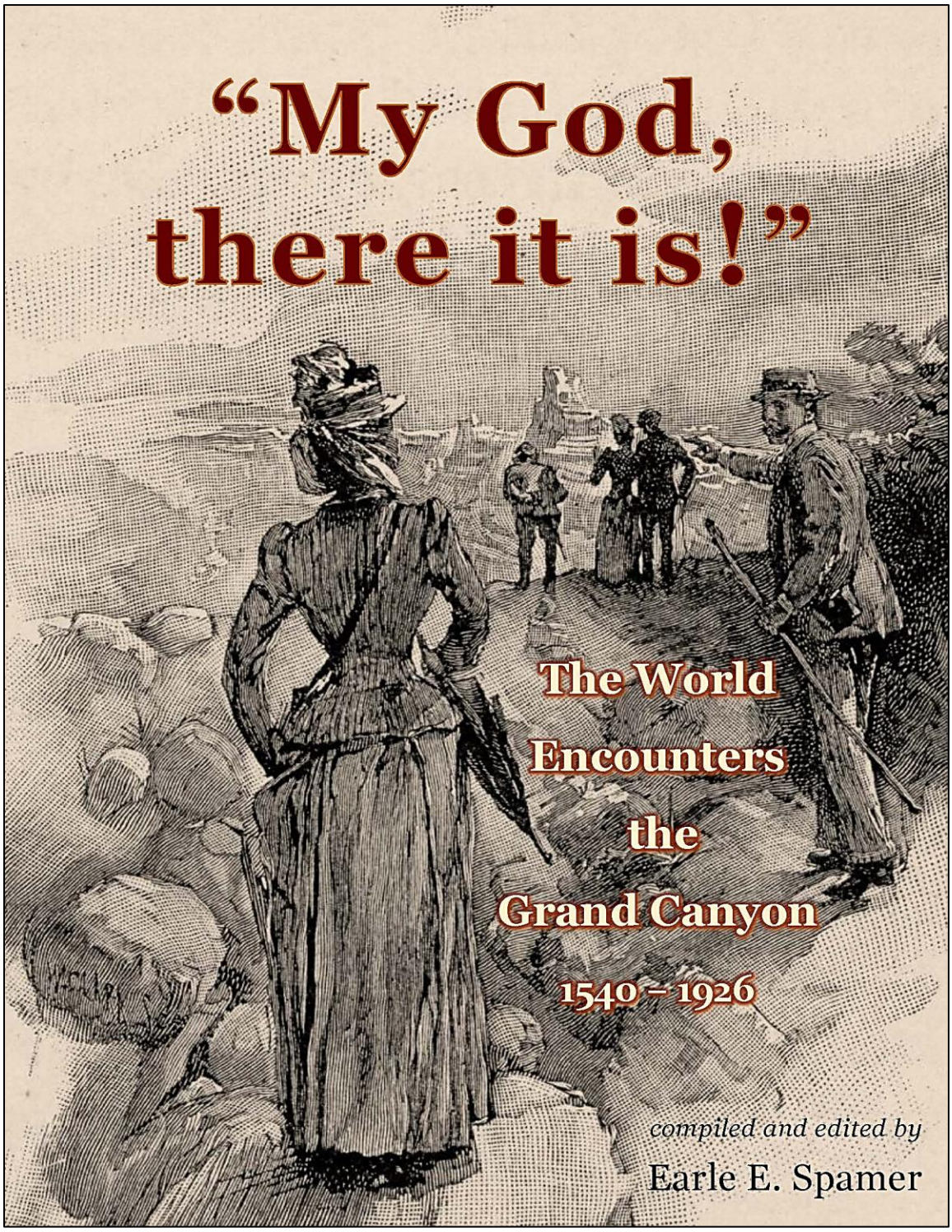
Not only did Blodget feel that he owned the data that he worked on—culminating with his acclaimed 1857 analytical study, *Climatology of the United States*—he also had compiled an exhaustive list of about 1,000 observers and correspondents from across North America and nearby, which Henry asked him to turn over. He refused—one more in a series of insubordinate manners. Henry fired him in 1854, without getting the bound register, an address book which Blodget later gave to the American Philosophical Society ("1854–Washington. Observers and Correspondents of the Smithsonian Institution," Mss.925.B62).

Blodget settled in Philadelphia in 1857, when he began his broad statistical career in earnest, working with the U.S. Treasury Department and the Philadelphia Board of Trade, among other agencies. He also performed analyses of U.S. Census data and was a prolific author of publications on foreign and domestic commerce and finance (see numerous listings at https://worldcat.org).

"Statement of Professor Henry in reference to Lorin Blodget," mid- February 1855 (https://siarchives.si.edu/collections/siris_sic_13365); Mark Rothenberg, "Henry and the National Museum: Making a Deal," Smithsonian Material Culture Forum Grapevine (May 2000, https://siarchives.si.edu/oldsite/siarchivesold/history/jhp/joseph24.htm). [Web links no longer valid and not rediscovered, but originally seen and cited in 2018 by Earle Spamer, "An Ill Wind Blows: Did John Wesley Powell Claim Jump the Grand Canyon?" *Boatman's Quarterly Review* (Grand Canyon River Guides, Flagstaff, Arizona), Vol. 31, no. 2 (Summer 2018), pp. 10-12.]

"Lorin Blodgett's [*sic*] Life Is Ebbing. Eminent Statistician Dying At His Home—His Long Public Career." *The Philadelphia Inquirer*, Vol. 144, no. 83 (March 24, 1901), p. 1. [Blodget in fact died that same day.]

Earle Spamer, "Connections: It's Always Who You Know and What You Hear," American Philosophical Society Library blog, Philadelphia (https://www.amphilsoc.org/blog/connections-its-always-who-you-know-and-what-you-hear, May 3, 2018; last accessed November 29, 2024).


"My God, there it is!"
The World Encounters the Grand Canyon
1540 – 1926
compiled and edited by
Earle E. Spamer

CHAPTER 3

"My God, there it is!"

THE WORLD ENCOUNTERS THE GRAND CANYON 1540–1926 (2022)[1]

COMPILED AND EDITED BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2022/10/ENCOUNTERS_PD_1540-1926.pdf (17 MB, 902 pp.) Title quote from Frank Caughey in *The Grand Canyon of Arizona: being a book of words from many pens, about the Grand Canyon of the Colorado River in Arizona* (Santa Fe Passenger Department, Chicago, 1902, p. 115).

PREFACE

THE GRAND CANYON really does exist. Was there any doubt? Maybe. People who had come all the way from Europe stood transfixed (surely) on the rim in 1540. A quarter century later, one man (who wasn’t there) wrote about that visit. It was forgotten. Two centuries later, another man passed by; he mentioned it in his diary. It was forgotten again. More than a half century after that, another man translated the account from 1540 and—finally, but obscurely—put it into print. More than another half century passed, when yet another man published the 1540 record in its original language along with another translation (in English, finally)—more than four and a half centuries from the time of that first visit. But in the meantime, between the two translations, the canyon had witnessed its first earnest visitors—in 1858 and 1869—and by the time that that second translation appeared folks had already been arriving at the canyon, in droves. They even were coming from Europe again. *And they all had to say something about it.*

This book compiles an edited series of transcriptions (and some translations) of the Grand Canyon visits that have come down to us between 1540 and 1926. The cut-off is not arbitrary, but reflects the fact that the publications to that year are now in the public domain; if they had had any copyright protection, it has lapsed. But 1926 also represents the earliest time when the Grand Canyon was one of the United States’ new national parks, which in itself meant that even more people were drawn to visit the chasm. Visitorship had been ramping up under the prolifically successful advertising campaign of the Santa Fe Railway, which for decades had been enticing its ridership to stop by the canyon—if indeed it was not the principal destination. The railroad drummed it into the collective consciousness of Americans of every traveling caste, whether they were aboard parlor cars and upper berths, or among the steerage class of those who bought only a seat. Even so, some of the early visitors arrived on their own, overland; and if they published anything about their experiences, it is also here.

The first world war encouraged Americans to “See America First” (a phrase originated by the writer Charles F. Lummis, who also had something to say about the Grand Canyon). The second world war dramatically reduced visitorship (everywhere), but afterward—oh, what a change. And Americans (and foreign travelers) never looked back. They, too, have had a lot to say about the Grand Canyon, which is far beyond the scoope of the present volume.

Here I quote from early visitors’ encounters with the Grand Canyon. If they had little to say, well and good, but those who gushed at length have had to be accommodated as well. Most were enthusiastic, as we might hope they would be, but there were a few who groused of their experience. They are all part of one story, a compilation of which has never before been made. There are anthologies, of course, that delve into a few of the works cited herein, but often even they curtail some of the additional interesting remarks that the writers had made. But I have no intention of replicating every word that they have written—especially those of the pioneer chroniclers, Balduin Möllhausen, Joseph C. Ives, John Wesley Powell, and Clarence E. Dutton in particular, who wrote entire books. I instead have had to arrange a transcript of worthwhile parts of their texts, which deliver specifically personal observations of their encounters with the Grand Canyon, going further than many of the time-honored (perhaps worn-out) series of quotations, although for comprehensiveness I must also embrace those exhausted scripts.

Beyond the luminaries, many if not most of the authors quoted here will be unknown; or perhaps just forgotten in the passage of years. Some were brief; others elaborated at such great length that the more essential accounts of their experiences had to be culled from even longer texts. They report observations, but better yet many of them go into personal reflections. Those who wrote in languages other than English are translated here, usually for the first time.

The writers often repeat what all the others said; it seems to be an affliction of writing about the Grand Canyon. Originality is at a premium. Yet, they bound along the canyon’s rim, and into the canyon, pointing and grasping and gasping. But they repeat. I confess that in the process of making some pleasant success in editing through these repetitive observations, I was myself

beset by architectural and chromatic fatigue, to the point that I thought it might be prudent to wash all such reflections from this book. But then, what would be point? It wouldn’t be a book of experiences of encounters with the Grand Canyon. So I became more tolerant, more judicious about how to allow the same things to be said. If we allow Clarence Dutton the luxury of being the first master of Grand Canyon scenic metaphor, all the rest are simply followers. Certainly, this impression is unkind to the followers, but the cycle does in fact continue once the reading and writing tourists arrived at the canyon.

The canyon is a very challenging subject, one that affects our abilities to be original. How many times can “kaleidoscope” be mentioned? How many times are we told about how Dante should have been at the canyon? How many times can we be told of specific examples of the great human works of architecture that are imagined to be sculpted into the Grand Canyon panorama? How many times can we be told that Mount Washington (or pick your own peak) can be thrown into the canyon and be surely lowered in significance within its depths? Niagara Falls and Yosemite are also very popular features utterly lost to view in the canyon, if they were there. And how many colors are there in all of creation that are represented in the Grand Canyon’s day? The journey in these pages will affirm a recitation of things that benumb the reader. We may have intuitively “known” this all along because we’ve read this over and over, but in bits and pieces, yet where has it ever been pulled together *in evidence*? In this book we have the chance to think *with* these writers, not simply to read what they wrote as if sitting in a lecture. We are there, with them, as they ramble, ride, and reminisce. As I said, one must be tolerant of all the repetitive observations and thoughts.

But, just where did all this architectural and chromatic chaos come from?

Traditionally, Clarence E. Dutton receives the nod of recognition. Yet his reflections, highlighted in a memorable chapter on the view from Point Sublime published in 1882, though they are more or less pioneering, are actually restrained compared to those that followed from other writers. He did not go on and on with ever more effusive thoughts; we are not overcome by those he delivers, and we drift pensively with him. So he sowed the wistful seed of imitation, which ran rampant.

Yet Dutton was *not* first. The true pioneers of sculptural and colored awareness of the Grand Canyon’s views are the fellow travelers of 1858, Balduin Möllhausen, Joseph C. Ives, and John Strong Newberry. Ives is more often, even giddily, remembered for saying that his troops would be the last outsiders ever to want to visit the region; but, in fairness, he also expressed his astonishment of its sublimity, as “valueless” and “profitless” as it was. On seeing the “splendid panorama” of the canyonscape for the first time, he wrote that “for a long time we paused in wondering delight, surveying this stupendous formation through which the Colorado and its tributaries break their way.” He seemed stunned. Yet Ives was more graphic while reconnoitering in Black Canyon on the lower Colorado River a month earlier, when he was still anticipating an arrival at “Big Cañon.” There, he described scenes that we may appreciate as an unanticipated rehearsal for the Grand Canyon (p. 86 of his “General Report”): “Stately façades, august cathedrals, amphitheatres, rotundas, castellated walls, and rows of time-stained ruins, surmounted by every form of tower, minaret, dome, and spire, have been moulded from the cyclopean masses of rock that form the mighty defile.”

It was Möllhausen who stepped out first at the Grand Canyon with the brief observation (in translation here): “There stood temples of marvelous architecture, long porticoes, and mighty but delicately formed pyramids; wide vaults, arched windows and gates opened up . . . .” These are familiar scenes and words that one will encounter throughout this book. A brief note by Newberry at the same time foretells the never-ending architectural analogies by later writers: “Many of these buttes exhibit a singular resemblance to the spires and pyramids which form the architectural ornaments of the cities of civilized nations.” Even though both Möllhausen and Newberry thus were truly the first to touch upon the ideas of grand architecture as imagined in the Grand Canyon, their brief notes either have not been known or have been dismissed by later writers, who have favored and honored Dutton’s eloquent passages. Who knows who inspired whom to begin troweling mortar onto the canyon’s landforms? Might have Ives himself have planted the very first literary seeds when he returned to camp wide-eyed from his several days’ passage up and back through Black Canyon?

The recurring, even cyclical, observations since the time of these pioneers come to us from the less restrained tourist legions. Their utterances in ink may well have been stimulated by Dutton’s dreamscapes, though most of these writers probably never saw his government tome; just quotations from it. A good number of them were instead incited by the essays and “sound bites” of the Santa Fe Railway’s promotional booklets of the turn to the twentieth century. The writers ramped up their narratives to stake for themselves a claim to originality—borrowing more analogies and fashioning more so-forths and so-ons—though it was just putting a spin on what they had read while trying to come to terms with just what the heck it was they had seen.

Despite the tedium of reexpression that one will encounter in this book, each of the hundreds of people quoted herein had taken the time to put their experiences on paper. A lot of them were indeed original, each in their own way; and a few were honest enough to credit any quotations they made. Some were very good at crafting their narratives; a few are stellar examples. And others, well, read on and discover them, too . . .

INTRODUCTION

SO MUCH HAS been written about the Grand Canyon from personal experience that it seems surprising that a comprehensive, separate compilation of these impressions has never been put together. The canyon’s worldwide popularity may call for it, but no one has made that call. So this book cites and quotes from all of these records of personal encounters with the Grand Canyon, or accounts told on behalf of those who were there, between 1540 and 1926.

True, a number of items have been reprinted in whole or in part in anthologies and similar volumes of prepared reprintings. Quite a few of them repeat the “same old” things. Beyond that, seemingly innumerable writers have quoted the “same old” passages from “A-list” authors like John Wesley Powell and Joseph C. Ives, even though Powell, Ives, and the others had many more interesting things to say beyond those quotations. This book has to use these standard works, too, for its claim to comprehensiveness and to present everything in one place. But it goes far beyond them, gathering up things that have

been forgotten or effectively never known. As for "B-list" writers (and lower), some of them probably should remain forgotten—for their unstimulated perceptions or tortured prose and verse—but this is not a work of critical analysis. Here is everything, as much as could be found, each someone's personal experience, lavish or cursory alike. Each one is a part of the Grand Canyon story up through 1926, take it or leave it. To have subjectively edited out the "less worthy" or "overly wordy" ones would dismiss the purpose of this book—to document the world's infatuation with the Grand Canyon. They came on purpose, and they expressed their impressions in many ways.

This book documents what is otherwise understood only by intuition or supposition—that the Grand Canyon is an intensely attractive draw, and people have "used" its resources intensely. Some things were published in languages other than English, which of course has dimmed their detection, at least among readers of English, so they are shown here in translation. For readers who know only of the English-language stories, this is an entirely new realm of Grand Canyon literature.

But frankly, how many ways can the Grand Canyon be described? How many ways do we *want* to read how it is described? All of them, actually; they are, each of them, essential to understanding what can only be described as a need to connect with the Grand Canyon.

This book arranges its quoted prose texts (Part I) by year *according to dates of visit* to the canyon—and for those items for which dates are unknown or uncertain, they are placed according to their dates of publication. The poems (Part II) are arranged by dates of publication. It cuts off at 1926 in order to focus on the historical items. These works are in the public domain; they can be re-used as needed.[2]

[2] The citations and texts of the present volume are drawn from a complementary, more ambitious, work—***The Grand Canyon! A Worldwide, Year-By-Year Anthology and Annotated Bibliography of Personal Encounters with the World's Greatest Draw, 1540–2022***. In that volume the non-prose publications are specially flagged, too; these record the work of poets, artists, photographers, musicians, playwrights, cinematographers, and architects—all of those people who during the 19th–21st centuries have had something to say about the Grand Canyon or have through their crafts expressed their impressions of the canyon. The present volume, though, is specifically about prose and poetry, so it is divided into the two genres—"The Writers" and "The Poets". On the other hand, the complementary volume (*The Grand Canyon!*) is more properly a comprehensive bibliography, arranged chronologically by

Some of the poems quoted herein have been gathered into various anthologies; occasionally those gatherings are arranged by the poets themselves. As best as could be determined, the sources cited herein are the first publications of those verses.

The editing process has removed portions of these texts that do not relate to or otherwise meander from the Grand Canyon experience, as well as various less-essential passages like the repetitive recitations of the physical dimensions of the canyon. (We get the idea that the canyon is “a mile” deep [more or less], and just *how many times* do we want to read that the canyon is thirteen [or fifteen, or eight, or so] miles across?) Other repetitions that distract from the overall “feel” for the author’s experiences are passed by, too; I admit, subjectively. The poems are for the most part quoted in their entireties.

Some users will object that there is no author index to this volume. Few authors cited herein will be known to most users—many of them are effectively passers-by. An index is not very useful if no one knows these people in the first place. Besides, that is what *The Grand Canon* offers, at far greater length; it serves as a very exhaustive alphabetical index, plus it lists contiguously all publications by a particular writer; so, regardless of the recognition factor everything is all there in one place. *The Grand Canon* is meant to be used.

WHEN THE FIRST non-Indigenous people, a small crowd of expeditionary incursionists from Spain, arrived on Grand Canyon’s rim nearly five centuries ago, in 1540, they eventually realized the intimidating size of the canyon but they were not rapt, excited, or meditative—at least that we know of. They left; and the general public knew nothing about the visit for three centuries.

publication date, but because it extends beyond the realm of material that is in the public domain, it provides annotations rather than extensive quotations for publications that follow 1926. In turn, the citations in these two complementary volumes have been culled from the more far-reaching bibliography by Earle Spamer, *THE GRAND CANON: A Worldwide Bibliography of the Grand Canyon and Lower Colorado River Regions in the United States and Mexico*, currently in its fourth edition (2022). (However, *THE GRAND CANON* does not extensively quote from many of its citations.) **All of the works mentioned here—and more—are freely available through the Raven’s Perch Media website, https://ravensperch.org, and various digital products may also have been acquired and included in the digital-publications collections of libraries.**

The next caller was Francisco Garcés, a Spanish Franciscan friar who in 1776 spent five days with the Havasupai Tribe before moving on. He appreciated the overwhelming ruggedness of the canyon barrier, but other than to confer upon it the name *Puerto de Bucareli*, to honor the Spanish viceroy of New Spain, he said relatively little about it; and again, the visit was for some time unknown.

It was the expedition under the command of Lt. Joseph C. Ives, U.S. Army Corps of Topographical Engineers, that launched the Grand Canyon into the public eye. In 1858 the government-backed expeditionary party traveled up the Colorado River by steamboat from the Gulf of California to Black Canyon. A land party struck out to the east, stopping at the Grand Canyon twice—in Peach Springs Canyon, where they reached the Colorado River at Diamond Creek, and on Cataract Creek (Havasu Canyon) where a few men descended nearly to the Havasupai village known today as Supai, Arizona. The historic illustrations produced by the expedition’s artists, Balduin Möllhausen and Friedrich Wilhelm von Egloffstein, published in 1861, immediately drew the canyon into the imagination of readers, in America and Europe particularly.

John Wesley Powell’s first Colorado River expedition, in 1869, was eagerly followed by the public for its adventure, which situated the Grand Canyon among the geographical and geological wonders of the world. Three men were killed in unclear circumstances after they abandoned the trip and climbed out of the canyon, even though the survey was nearly completed. During and after a second river trip in 1871–1872, Powell extended his surveys on land, culminating (at least with regard to the Grand Canyon) with work north of the canyon during 1879–1881. From that work Clarence Dutton’s overwhelming *Tertiary History of the Grand Cañon District*, with its magnificent double-folio *Atlas*, was published in 1882. The text included his marvelous, chapter-long description of the view from Point Sublime.

Artist Thomas Moran had accompanied a Powell party on land a decade earlier, from which visit he produced his epic canvas, *Chasm of the Colorado* (1873–1874), which, with his *Grand Cañon of the Yellowstone* (1871), was purchased by the federal government and hung in the U.S. Capitol. These works cemented the American public’s fascination with the canyon, and announced

Thomas Moran, *Chasm of the Colorado*, oil, 7 × 12 feet. *(U.S. Department of the Interior.)*

to a wider world community the scenic, aesthetic, and scientific values of the grand scenery of the American West.

When in 1883 the Atlantic & Pacific Railroad completed its trackway across northern Arizona, its division point at Peach Springs offered the traveling public access to the Grand Canyon for the first time. Julius Farlee was quick to capitalize (somewhat) on this, advertising a stage conveyance into the canyon, which followed, as did Ives a quarter century earlier, Peach Springs Canyon and Diamond Creek to the Colorado River. He also threw together a shack of a “hotel” at the Diamond Creek confluence for the use of his guests. All of his services were at best rudimentary, as the reader will (re)discover herein.

The fledgling town of Flagstaff also soon capitalized on the presence of the “grander” portion of the canyon nearby, though the sixty-mile venture by wagon from the railroad was more ambitious than was the dusty, rocky descent into the canyon at Peach Springs. John Hance built a cabin and tent accommodations for visitors on the verge of the canyon rim and continued to improve on them. So in short order, Hance’s was the favored destination. Peter (Pete) Berry soon thereafter offered a somewhat more sumptuous, though still

rustic, hotel at Grand View, to the west of Hance’s place. Both places offered conducted trips into the canyon; some visitors experienced both. Hance’s offerings, at least at first, could be downright harrowing, sending his guests in several places down (and back up) steeply pitched or dangling ropes. Berry’s trail was just plain steep.

And my oh my, did everyone then have something to say about the Grand Canyon. That, in essence, is it—*everyone* has to say something about it.

So began America’s, then Europe’s, and then the world’s love affair with the Grand Canyon. All things considered, it has not been a tourism lure for really very long, barely a century and a half, with the numbers burgeoning only within the last century.

Yet even at the start, adventurous men took to the river—women did come later. First was the ill-fated expedition led by Robert Brewster Stanton in 1889–1890; a scouting and photographing trip meant to establish the route of the flash-in-the-pan Denver, Colorado Cañon & Pacific Railroad. Three men lost their lives in the river during the first part of the journey, which then was cut short in order to regroup and continue the following year. And when the photographer was seriously wounded, Stanton himself, not a trained photographer, had to take over that duty (with admirable results).

The first party to run the river strictly for adventure followed in Powell’s and Stanton’s wakes in 1896, when George Flavell and Ramon Montez rowed from Green River, Wyoming, to Yuma, Arizona; though we could not share much of their venture until Flavell’s diary was published in 1987. Running the Colorado River through Grand Canyon became by the 1940s a certain thing, even though at that time only fewer than three hundred people had made the trip, most of them with early commercial outfitters who offered a genuine wilderness experience.

The enlightened years of environmentalism that erupted in the world conscience by the 1960s also opened up the Colorado River in ever broader ways, attracting more of the everyday folk to the outdoors. By the centennial of the first Powell expedition thousands had taken oar- and motor-powered commercial trips through Grand Canyon; some 15,000 by 1969 but ballooning

to more than 100,000 by 1976—and by 1995 more than a half million could claim to have gone through Grand Canyon. The total number reached a million soon after 2020. One of the earliest tallies of canyon visitors was noted for 1892, when just 149 people took the ride from Flagstaff to Hance Camp. The rising figures for visitation to the national park after its establishment in 1919 are progressively astonishing. From just 37,745 visitors that year, the numbers reached a half million by 1947. The million mark was passed in 1956; in 1992 more than four million visitors descended on the canyon; five and a half million in 2015; and more than six million in 2017.[3]

These figures represent the millions and millions of people who have felt the need just to *go* to the Grand Canyon. Thousands have written about their experiences, especially in the past several decades, about which we know thanks to the proliferation of newsletters and organizational magazines that have been made much more freely available in PDF format on the web. Before about 1990 we had to wait usually for inkprint products to appear in mailboxes and on the shelves of libraries and stores; and there were plenty. (We will barely acknowledge the deluge of contributions via modern social media, which range from excellent to mindless.)

THIS BOOK QUOTES, in partially edited and annotated form, the experiences people have had with the Grand Canyon, from the time of the first foreigners' visit in 1540, to 1926. The end date coincides with the year after which many publications are still under the various protections of copyright. As such, these selections include all the years prior to the creation of Grand Canyon National Park (in 1919) and the first few years during which the park was administered by the U.S. National Park Service. The editing process has removed portions of these texts that do not relate to the Grand Canyon experience, as well as various less-essential narrative such as the repetitive recitations of the physical

[3] Park visitation figures and river-runner counts from C. V. Abacus [pseudonym of Richard D. Quartaroli], "River Runners of the Grand Canyon: Over 1,000,000 served", *Boatman's Quarterly Review*, Volume 53, no. 3 (Fall 2022), pp. 20-22. The early visitors' figures are as mentioned by Lilian Whiting, *The Land of Enchantment: From Pike's Peak to the Pacific* (Little, Brown and Co., Boston, 1906). The figure from 1892 was mentioned by Max Graf von Zeppelin, who visited in 1893 ("Das Grand Canon des Colorado in Arizona", *Vom Fels zum Meer* (Stuttgart), Volume 14, no. 2 (April/ September 1895), p. 263).

dimensions of the canyon, and other repetitions that distract from the overall “feel” for the author’s experiences.

It may seem ludicrous to transcribe into this bibliography any part of the widely known primary publications—particularly those of “A-list” writers like Ives, Powell, and Dutton. (I now add Möllhausen to the “A” list because, until now, his complete Grand Canyon experience has been out of reach to readers who understand only English.) While my quotations may parrot the work of anthologists and casual quoters by the hundreds before me, I recognize that adjacent portions of the usual quotations have been unfortunately passed over, even though they do give more perspectives of these writers’ inner feelings and expressive talent. As for the remainder, among whom are some who lack expressive talent, they convey personal impressions to a wide audience, all of whom contribute to the experience of having been to the Grand Canyon, and on the Colorado River. So I offer the time-worn transcriptions, with some additional pieces that hopefully expand upon the “usual” quotations, placing them in a more engaging frame of reference. And in the company of these long and short, reused quotations are hundreds of items that have not seen the light of day since they were first published. This allows the reader to place in perspective—*in one place*—all of the quotations presented herein.

There are a few quotations that have been so often repeated (reflectively, though sometimes giddily) that I thought to not only simply transcribe them but to reproduce these shorter passages in facsimile, to allow the reader the enjoyment of seeing them exactly as they were printed. (For example, Joseph Ives’ pronouncement—reprinted to death—that the Grand Canyon is a “profitless locality” that no one will ever be bothered to return to. I also provide in facsimile for the first time, *all four* pages of the 1596 manuscript copy of Pedro de Castañeda’s chronicle of the Spanish encounter with Grand Canyon of 1540.) These few selections of facsimile reproductions are inserted where appropriate.

The main intent of this book is to provide all of these texts in a handy, easy-to-read format, without the encumbrances that come with more rigorously compiled scholarly publications. And while this is in a sense a bibliography, it

is really an anthology of all of the Grand Canyon experiences that have been published to 1926—at least so far as have been found.

“My God, there it is!” arranges most of its prose entries according the *year in which visits were made* to the Grand Canyon. Those accounts for which the year is not known are listed according to their years of publication. In this way, a more seamless view is had of changing perspectives over the years. Only the first publication of an item is listed, for those that may have been reprinted over the years. The complementary volume, *The Grand Canyon!*, is arranged strictly by year of publication and includes all reprintings, translations, and other variants produced over time.

Herein, publications that were produced in non-English languages provide English translations of the quoted texts. Cross-listings to the complementary volume, *The Grand Canyon!*, are provided in order to direct readers to the transcriptions of the original languages, should such be desired.

Finally, one may question too why so many repetitive topics are quoted. It is precisely because many writers described with great effort the very things that had been described by others before them—again and again. We of course “know that”, but here are the contiguous pieces of evidence. Yet if I were to have outrightly omitted an author’s work for having had the audacity to repeat what was already known, it would hardly make this a documentary work. What strikes me most, perhaps unexpectedly, is that over the years, whether at Hance’s, or Bright Angel Hotel, or El Tovar, the anxious tourists, who had just arrived, stop to eat before proceeding those final few feet to “see” the canyon! Some do dash onward to the scene—just a few yards away—but a lot of them stop for a bite first. We would not know this if all the accounts were not presented in one place. And there are other repetitions, too. How many times can “kaleidoscope” be mentioned? (In this book, seven times.) How many times are we told about how Dante should have been at the canyon? (15) or the painter Doré? (2, although I am surprised at the count, as I thought there were more, which may be a telling effect of all the other repetitions). And how many times can a writer use the specific phrase, “down, down”? (12) or, more emphatically, “down, down, down” (2) and “down! down! down!” (3). Then there is the persistent focus on “silence”, which in more recent time has been a

Grand Canyon buzz-word in the areas of administration and aesthetics; and about which I offer herein a separate documentary overview—evidence that “silence” was, even a century and more ago, an important part of the Grand Canyon experience.

MANY CITATIONS in this book are for publications and products that are not in English—*in Czech, Danish, Dutch, French, German, Hungarian, Italian, Norwegian, Portuguese, Spanish, and Swedish*. All non-English items specify the language and provide a translation of the item title. For example, this book by a Frenchman who had visited the Grand Canyon; unusually for the date it was a trip to the North Rim:

Tissandier, Albert

1886 *Six mois aux États-Unis : voyage d’un touriste dans l’Amérique du Nord, suivi d’une excursion à Panama.* Paris: G. Masson, 298 pp. [In French.]

(*transl.* ‘Six months in the United States: a tourist trip to North America, followed by an excursion to Panama’)

In the main entry herein, Tissandier’s Grand Canyon experience is translated to English, and a cross-reference is provided to a transcription of the original French that appears in *The Grand Canyon!* —

[The original French text is transcribed in *The Grand Canyon!*, № 307.]

Most translations have been obtained through the use of Google Translate online. Admittedly, Google Translate is imperfect, insofar that it is a so-called “neural machine translation service” that translates a sentence at a time, which over time has “learned” to construct better and more grammatically correct sentence structures and word selections. But far from this being a simple transfer of translations from Google Translate, this book is the product also of judicious editing, first for sense, then when necessary using retranslations to avoid awkward synonymies introduced by Google Translate. Conventional foreign-language dictionaries have assisted, as also have other translation resources. I make this note here so that users of this book can take into consideration any perceived negative aspects of Google’s programming interface during the timeframe when the translations were made, chiefly during 2021–

2022. Still, the translations are reasonably good, if not accurate, within the subjective nuances of foreign-language translation.

In the end, should evidence indicate some substantial flaw with this process, the transcribed texts in their original languages are still freely available to users of the complementary volume, *The Grand Canyon!*, who either can read these languages or who wish to digitally extract the originals for other uses. ▪ ▪ ▪

The Grand Canyon!

A Worldwide, Year-By-Year Anthology and Annotated Bibliography of

Personal Encounters *with the* World's Greatest Draw

1540–2022

compiled and edited by

Earle E. Spamer

CHAPTER 4

THE GRAND CANYON! (2022)[1]

A WORLDWIDE, YEAR-BY-YEAR ANTHOLOGY AND ANNOTATED BIBLIOGRAPHY OF PERSONAL ENCOUNTERS WITH THE WORLD'S GREATEST DRAW 1540–2022

COMPILED AND EDITED BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2022/10/ENCOUNTERS_1540-2022.pdf (20 MB, 1,364 pp.)

By Boot, In Saddle
and with Motor, Oar and Paddle

The Grand Canyon! is all about being at and interacting with the Grand Canyon.

So much has been written about the Grand Canyon from personal experience that it may be surprising that a comprehensive record of these impressions has never been put together. Never has every reference been compiled —nor for that matter have so many items been forgotten from the very time they were published. Yes, there are bibliographies, but most of them are specialized or embrace the tremendous hail of everything that goes beyond personal records and impressions. The Grand Canyon! cites, quotes, and annotates the published records of personal encounters with the Grand Canyon, or accounts told on behalf of those who were there, from 1540 to 2022.

True, a number of items have been reprinted in whole or in part in anthologies and similar volumes of prepared reprintings, but they are selective; some repeat the "same old" things. Beyond that, seemingly innumerable writers have quoted the "same old" passages from "A-list" authors like John Wesley Powell and Joseph C. Ives, even though Powell, Ives, and the others had many more interesting things to say beyond those quotations. This volume has to use these standard works, too. But it goes far beyond them, gathering up things that have been forgotten or effectively never known. As for "B-list" writers (and lower), some of them probably should remain forgotten—for their unstimulated perceptions or tortured prose and verse—but this is not a work of critical analysis. Here is everything, as much as could be found, each someone's personal experience, lavish and cursory alike, each a part of the Grand Canyon story, take it or leave it. Some things were published in languages other than English, which of course hid their discovery at least among readers of English. As many of these as possible have been found, too; and they are reprinted in their original languages *and* in English translation herein. To have subjectively edited out the "less worthy" or "overly wordy"

publications, or those that simply are not in English, would dismiss the very administrative purpose of this volume—to document the world's infatuation with—its "use" of—the Grand Canyon.

This volume documents what is otherwise understood only by intuition or supposition—that the Grand Canyon is an intensely attractive draw, and people have "used" its resources intensely. This volume goes beyond prose, gathering up the works of poets and the publications that record the work of artists, photographers, musicians, cinematographers, and architects—all of those people who have used their crafts to express their impressions of the canyon. And it has seemed logical to split the main part of this volume into the two principal Grand Canyon venues—arriving and seeing it from the rim and on its trails, and experiencing it along the Colorado River.

The Grand Canyon! is complemented by another volume, based on this one: *"My God, there it is!": The World Encounters the Grand Canyon, 1540–1926*. The complementary volume arranges for that time period, in a more aesthetically pleasing and more easily read layout, all of the transcribed texts that appear in the The Grand Canyon!, prose and poetry alike. But for those items originally in non-English languages, only the English translations are published there. Readers who need to consult the original non-English texts are, through cross-references, directed back to pertinent enumerated citations here in The Grand Canyon! The complementary volume gathers all the publications that are now in the public domain; that is, those that have lapsed from any copyright protection—at present it contains all those things through 1926. The digitally published public-domain texts that appear in both volumes can also be freely reused for users' own specific needs.[2]

WHEN THE first non-Indigenous people, a small crowd of expeditionary incursionists from Spain, arrived on the canyon rim nearly five centuries ago,

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in 1540, they eventually realized the intimidating size of the canyon but they were not rapt, excited, or meditative—at least that we know of. They left; and the general public knew nothing about the visit for three centuries.

The next caller was Francisco Garcés, a Spanish Franciscan friar who in 1776 spent five days with the Havasupai Tribe before moving on. He appreciated the overwhelming ruggedness of the canyon barrier, but other than to confer upon it the name *Puerto de Bucareli*, to honor the Spanish viceroy of New Spain, he said relatively little about it; and again, the visit was for some time unknown.

It was the expedition under the command of Lt. Joseph C. Ives, U.S. Army Corps of Topographical Engineers, that launched the Grand Canyon into the public eye. In 1858 the government-backed expeditionary party traveled up the Colorado River by steamboat from the Gulf of California to Black Canyon. A land party struck out to the east, stopping at the Grand Canyon twice—in Peach Springs Canyon, where they reached the Colorado River at Diamond Creek, and on Cataract Creek (Havasu Canyon) where a few men descended nearly to the Havasupai village known today as Supai, Arizona. The historic illustrations produced by the expedition's artists, Balduin Möllhausen and Friedrich Wilhelm von Egloffstein, published in 1861, immediately drew the canyon into the imagination of readers, in America and Europe particularly. John Wesley Powell's first Colorado River expedition, in 1869, was eagerly followed by the public for its adventure, which situated the Grand Canyon among the geographical and geological wonders of the world. Three men were killed in unclear circumstances after they abandoned the trip and climbed out of the canyon, even though the survey was nearly completed. During and after a second river trip in 1871–1872, Powell extended his surveys on land, culminating (at least with regard to the Grand Canyon) with work north of the canyon during 1879–1881. From that work Clarence Dutton's overwhelming *Tertiary History of the Grand Cañon District*, with its magnificent double-folio *Atlas*, was published in 1882. The text included his marvelous, chapter-long description of the view from Point Sublime. Artist Thomas Moran had accompanied a Powell party on land a decade earlier, from which visit he produced his epic canvas, *Chasm of the Colorado* (1873–1874), which, with his *Grand Cañon of the*

Thomas Moran, *Chasm of the Colorado*, oil, 7 × 12 feet. *(U.S. Department of the Interior.)*

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The fledgling town of Flagstaff also soon capitalized on the presence of the "grander" portion of the canyon nearby, though the sixty-mile venture by wagon from the railroad was more ambitious than was the dusty, rocky descent into the canyon at Peach Springs. John Hance built a cabin and tent accommodations for visitors on the verge of the canyon rim and continued to improve on them. So in short order, Hance's was the favored destination. Peter

(Pete) Berry soon thereafter offered a somewhat more sumptuous, though still rustic, hotel at Grand View, several miles west of Hance's. Both Hance and Berry, and their employees, conducted trips into the canyon at their respective places; some visitors experienced both. Hance's offerings, at least at first, could be downright harrowing, sending his guests in several places down (and back up) steeply pitched or dangling ropes. Berry's trail was just plain steep.

And my oh my, did everyone then have something to say about the Grand Canyon. That, in essence, is it—*everyone* has to say something about it.

So began America's, then Europe's, and then the world's love affair with the Grand Canyon. All things considered, it has not been a tourism lure for really very long, barely a century and a half, with the numbers burgeoning only within the last century.

Yet even at the start, adventurous men took to the river—women did come later. First was the ill-fated expedition led by Robert Brewster Stanton in 1889–1890; a scouting and photographing trip meant to establish the route of the flash-in-the-pan Denver, Colorado Cañon & Pacific Railroad. Three men lost their lives in the river during the first part of the journey, which then was cut short in order to regroup and continue the following year. And when the photographer was seriously wounded, Stanton himself, not a trained photographer, had to take over that duty (with admirable results).

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commercial trips through Grand Canyon; some 15,000 by 1969 but ballooning to more than 100,000 by 1976—and by 1995 more than a half million could claim to have gone through Grand Canyon. The total number reached a million soon after 2020. One of the earliest tallies of canyon visitors was noted for 1892, when just 149 people took the ride from Flagstaff to Hance Camp. The rising figures for visitation to the national park after its establishment in 1919 are progressively astonishing. From just 37,745 visitors that year, the numbers reached a half million by 1947. The million mark was passed in 1956; in 1992 more than four million visitors descended on the canyon; five and a half million in 2015; and more than six million in 2017.[3]

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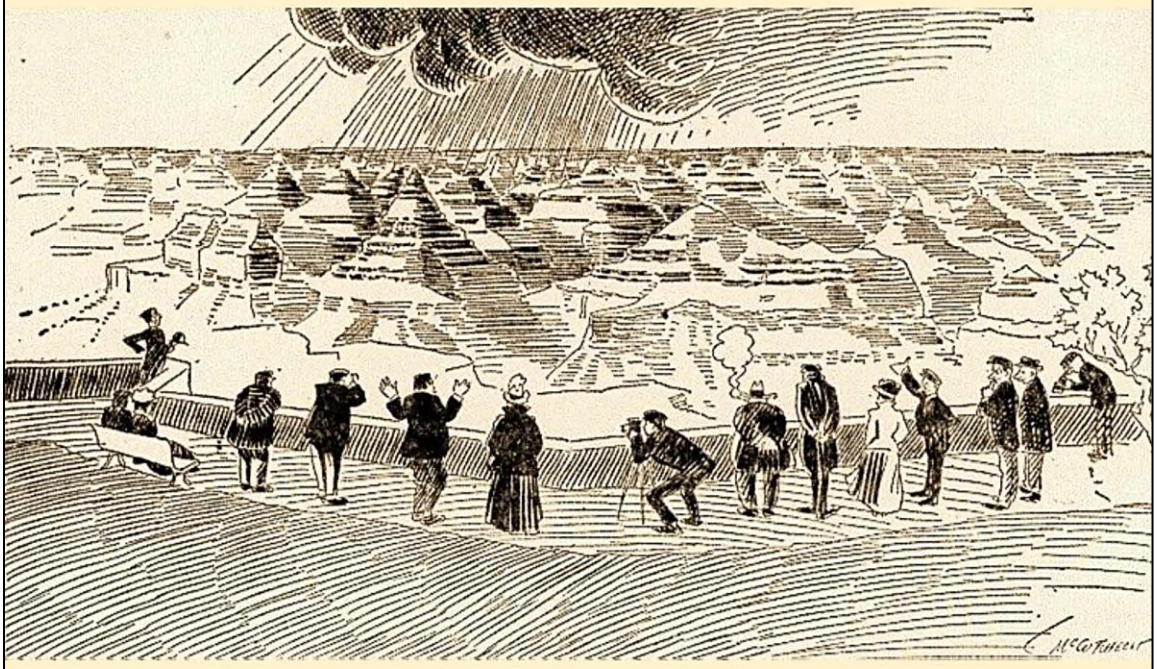
Yet the expressive forms by which people have experienced the Grand Canyon are more far-reaching than writing essays and travel notes. Poetry comes to mind, and quite a lot of verse has been written about the canyon. But there are other artistic expressions—paintings, musical pieces, stage performances, and architectural constructions, for example. These forms are well represented, too, as means by which encounters with the canyon have have been interpreted and shared. ▪ ▪ ▪

[3] Park visitation figures and river-runner counts from C. V. Abacus [pseudonym of Richard D. Quartaroli], "River Runners of the Grand Canyon: Over 1,000,000 served", *Boatman's Quarterly Review*, Volume 53, no. 3 (Fall 2022), pp. 20-22. The early visitors' figures are as mentioned by Lilian Whiting, *The Land of Enchantment: from Pike's Peak to the Pacific* (Little, Brown and Co., Boston, 1906). The figure from 1892 was mentioned by Max Graf von Zeppelin, who visited in 1893 ("Das Grand Canon des Colorado in Arizona", *Vom Fels zum Meer* (Stuttgart), Volume 14, no. 2 (April/ September 1895), p. 263).

"TOO NUMEROUS TO NAME"



Noteworthy (*and Unfamiliar*) People of The Grand Canyon of Arizona

AN ANNOTATED BIOGRAPHICAL BIBLIOGRAPHY

EARLE E. SPAMER

CHAPTER 5

"Too numerous to name"

NOTEWORTHY (AND UNFAMILIAR) PEOPLE OF THE GRAND CANYON OF ARIZONA (2024)[1]

an annotated biographical bibliography of historic connections, individual accomplishments, records of peculiar or transient interest,and notable visitors since 1540

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2024/08/Too-numerous-to-name.pdf (10 MB, 1,234 pp.)

“…many more too numerous to name…”

THIS PHRASE caught my eye.[2] On the fly, the article in which it appeared dashed off a few names of famous people who had been to the Grand Canyon, finishing with this flirting remark. Of the names that were noticed, why were *they* chosen, from what sources? And who were the ones that couldn’t be squeezed in or, more to the point, were dismissed out of hand? In this fashion over the years, magazine and newspaper articles have repeatedly hurried onto pages the names of some famous people who had stopped by the Grand Canyon; usually without elaboration. The lists seem arbitrary, as if picked even from other lists. But where is the evidence for any of these visits; evidence that can be cited (with certainty), items that people can find if they need them? And then, what of the subjectively non-famous people? No one seems to bother with them, at least not as an inclusive gathering.

The “famous” who come to the canyon are often with official entourages, or at the least are specially met and conducted around at a time when they retain significant name recognition. Such stopovers do not come without consequences; these people do not travel alone. A canyon break by the likes of President Barack Obama and his family while he was in office, or when retired President Richard Nixon stopped by, can be disruptive for visitors who, having traveled all that way, are confronted by road and area closures, security entourages, and extra-attentive Park Service personnel beyond the protective perimeter. Less commotional because it took place far from the crowds was Senator Bobby Kennedy’s family break rafting on the Colorado River, but the trip was still excitedly captured in the national press.

The Obama visit was not an official visit; the family was on vacation. Even though the canyon stop by the sitting president was relatively short, wherever they went the public was cordoned off. Their presence upset the routines and movements of Grand Canyon residents, too, although according to a local newspaper account many of them were more thrilled to witness the

[2] Anonymous, “Famous People at the Grand Canyon”, *The Ol’ Pioneer* (Grand Canyon Pioneers Society [later the Grand Canyon Historical Society]), Vol. 10, no. 3 (July/September 1999), p. 2.

spectacle of a Boeing 747 (Air Force One) land at the Grand Canyon National Park Airport in nearby Tusayan. The Nixon visit, on the other hand, was as if he were a celebrity who caught his fellow visitors by surprise; he signed autographs.

When President Bill Clinton helicoptered aboard Marine One from the South Rim to remote Tuweep in western Grand Canyon, to ceremonially sign an Antiquities Act proclamation that created the new Grand Canyon–Parashant National Monument, security in the wide-open rangeland dictated an emergency “safe” place—in the bathtub of the ranger’s residence, covered by bullet-proof blankets. National Park Service rangers Liz and Clair Roberts recalled that they thought they should make sure the tub was cleaned beforehand.[3]

And President Joe Biden was ushered to the old Red Butte Airfield south of Tusayan. There, in the presence of Native American tribal members in the shadow of sacred Red Butte, he signed an Antiquities Act proclamation that created the Baaj Nwaavjo I’tah Kukveni–Ancestral Footprints of the Grand Canyon National Monument to help protect the cultural and environmental landscapes surrounding the national park.

Added to those of prominence—who simply by showing up was news in itself—there are, oh, so many people who *did* things at the canyon and along its river. Some of them are legendary, whether they are devoted canyonophiles or canyon gatecrashers (for example, Harvey Butchart and Colin Fletcher, respectively). And others—well, to most people they are unknown, especially those who were just in some unremarkable job function. Their kind show up spottily in publications, as unexciting news notes, though once in a while as subjects of curiosity or amusement, like those who dared the devil by leaping over deep crevasses or actually falling into the canyon in stunts. To them add the legions of tourists who stayed hours or weeks, some of them writing of their experiences and embracing their thoughts for us; publications that have been captured in the citations herein and in other bibliographies. Everyone mentioned here is part of the record. The published literature grabs bits and

[3] Liz Roberts (compiler), *John Riffey Memorial Tall Tale Rendezvous : Tuweep, Arizona, Grand Canyon National Park, April 21, 2001.* [Tuweep, Arizona]: [Liz and Clair Roberts]. [Informal distribution in multiple copies, with loose-leaf updating.]

pieces of their doings, which have been collated here before they fully fade away like weather-worn gravestones. And through the citations those bits and pieces can be used as documentary evidence for one thing or another, or if necessary be found again (most with reasonable ease).

For decades we have had the handy and profuse Marquis *Who’s Who* publications that gather up notable and less renowned people of the world. This bio-bibliography serves in the same vein, while restricting its subjects to those who passed by or through (or sometimes over) Grand Canyon. It takes a step further, by adding to the merely and nearly famous those “who should be who” and quite a number who are “*who!?*” Yet every one of these people made it into print, parts of the canyon story. Why should the less conspicuous ones be passed over because “they weren’t anybody”? One never knows who or what event will be of interest—significance, even—to someone now or far in the future who has a task at hand, a hunt in mind, or a looming deadline. They can dismiss specific people who appear in this volume, but to not have been informed of them in the first place is indefensible.

Naturally, a number of people listed in this bio-bibliography are well remembered. Others are recognized within limited circles. Some are casually known to a few. And probably more than a scattering are rescued before they unconditionally vanish from history. It is this last group that might be of wider-than-expected interest *because* of their inconspicuousness; each of them is likely to be new and might inspire interest. It is easy to grasp hold of the news of a famous person passing by, or a memorable “doer” doing their thing, but a writer or an editor, somewhere, had once thought it momentarily worthwhile to notice a person on the farthest seat in the theater, even if just in a few lines to help fill out a magazine page—and then I recovered them in the process of bibliographing my way around the world on behalf of the canyon and river.

My journey has thus far been fifty years in the making[4], beginning with things that rested on wooden and metal shelves, eventually moving into the

[4] I began the Grand Canyon–Lower Colorado River project in September 1974. The first published bibliography was produced by the Grand Canyon Natural History Association in 1981—the time-honored way, from typewritten manuscript to typeset galley proofs to inkprint volume. The bibliography graduated in 1990 to concomitant releases as loose-leaf inkprint, microfiche, and ASCII-format (text-only) digital disks (5¼-inch “floppies”), with a similarly produced supplement in 1993. In 2000 the

electric wildness of web-posted publications and documents.[5] I recognize that there are books, magazines and newsletters of which I am unaware that will contain things written by or about people who visited or did things at Grand Canyon. These items, wherever they are, are phantoms; so be it. Someday they may be found by another compiler or a historian working on something.

A marvelous advantage of the web is its access to public and genealogical records. A number of people listed in this volume are accorded more biographical information than had been gleaned from the publications cited here, helping to make them a little more humanly interesting without dipping into the barrel of exhaustive biography. Thus, for example, many people have full names and dates that were not available even in their obituaries. A few additional notes may also be added that allow the reader to know a bit about what it is these people did in their lives other than their having worked at or stopped by the canyon or run down (or up!) its river. One will see that a great number of them were conspicuous players within their own occupational fields; and thus in a sense they too are “famous” visitors, whether they arrived before, during, or after their time of greatest public notability.

Obviously there is a lot more that can be done to create a truly comprehensive and more informative biographical bibliography, not the least part of which would be to include photographs. But at this time the prospect of hunting down so many sources—and permissions to reuse if they are not in the public domain—is unmanageable, perhaps unimaginable, for one person. It would also hugely expand the size of this volume even when many people would still lack photographs. Images of the more notable ones can be seen widely on the web anyway. Nonetheless, the opportunity is taken in this

bibliography became a searchable database online, which survived until 2021 before succumbing to technological difficulties; but in 2010 I began preparations for the digital, book-format PDF replacement of the monograph, which is *The Grand Canon* now in three separately compiled, topically distinct volumes; and from these other specialized bibliographies and historical works are available through Raven’s Perch Media (https://ravensperch.org).

[5] On the web I have limited my searches to digitized publications, including magazines and newsletters, which if needed again are likely to be found in various places not limited to single websites, perhaps even as paper originals. Random web pages, blogs, podcasts, and the like, are not considered because of their ephemeral nature. I explain this at length in the introductory matter for *The Grand Canon*.

volume to include references to selected photographs that appear in widely available, still in print, pictorial publications.

A substantial number of historically focused publications can be dissected further in order to obtain more biographical information and new additions to the list of people. The reason this has not been done here is that such effort is similar to indexing a book—a much more time-consuming process that anyway is not the purpose of this general bio-bibliography.

Readers may be delightfully surprised by the people and activities about which they never knew. True, quite a number of them are "minor" players in the Grand Canyon–Colorado River story. Some users may toss them aside as not being parties to their interests. But then again, a few users might in fact *become* interested in the bit parts played by these people—so here they are.

This work even manages to corral a few animals of special notice, too. "Chiggers" the mule, for one, would have been unknown had Grand Canyon tourist Elmer Mateas not sued Fred Harvey for injuries sustained when he was bucked from the saddle. It was a case that he won in the U.S. Circuit Court of Appeals and which later exercised the legal mind of Mason Ladd, a prominent law professor who animatedly entertained his students with a rendition of the events on the trail and the litigious path through the courts.

All this said, the likes of this work has not appeared from the pen or keyboard of anyone before me. Even with its shortcomings, it will be useful until someone else again takes up the task to better it. Yet—alas—bibliographies are not generally seen as fireside reading[6] and modern publishers take on only the most historically (and moreso those that are economically) promising ones because publishing a bibliography as such really forecasts few users and lean sales. This may thus discourage further work on this and other bibliographies. Still, such compilations provide *information*—facts which at one time or another, to one person at a time, now and long into the future, may

[6] I have, in fact, advocated for the *reading* of bibliographies; they can be more than simple item-level reference works. See in the "Preamble (or, Read Me)" to the 4th edition of *The Grand Canon* (or download just the preamble as https://ravensperch.org/preamble-or-read-me/ [URL updated to 2025 edition]. [See also in the present volume an extract in the section on "Looking Into the Grand Canyon, Volume 1, Part A."]

be useful toward whatever task is at hand. Thus I do this work for the few and the future; hopefully it is helpful. And the Raven’s Perch Media offerings are all produced free of charge, with downloads and permanent retention permitted.

I finish with some fairly inconsequential incidents reported by lesser known Grand Canyon visitors, which interestingly, in the midst of the time when travelers often spent many days at the canyon, herald modern-day reports that few visitors spend much time actually viewing the canyon. In 1912, Quaker missionary and art collector Susan Janney Allen visited the canyon but wrote only of her Hopi House shopping, finishing, “**But I must hurry on to California . . . .**” In 1913, Charles E. Jefferson, the long-serving pastor of New York’s Broadway Tabernacle, recalled, “I once heard a man standing near the edge of the Grand Canyon of the Colorado and say to a friend near him: **‘I wonder how soon we can get out of here.’** He had looked at the canyon possibly two minutes, and he had gotten enough of it.” And in 1922 Annette Thackwell Johnson recalled a young woman’s barely substantiated dismissal of the canyon, which then was a new national park: “ ‘No, we don’t care much for it,’ declared the bride. ‘And I’m awfully disappointed in the colors. I thought we’d have blue and violet instead of all that henna! I’m so fond of blue . . . . **We think we’d rather spend what extra time we have at the Los Angeles beaches** —Venice, for instance. So we are going to catch the ten o’clock train.’ ”

So, one can *read* this bio-bibliography if they have a mind to—the pleasure is in the details—and in doing so make discoveries one by one. Jump in anywhere. Try it; you may not wonder how soon you can get out of here!

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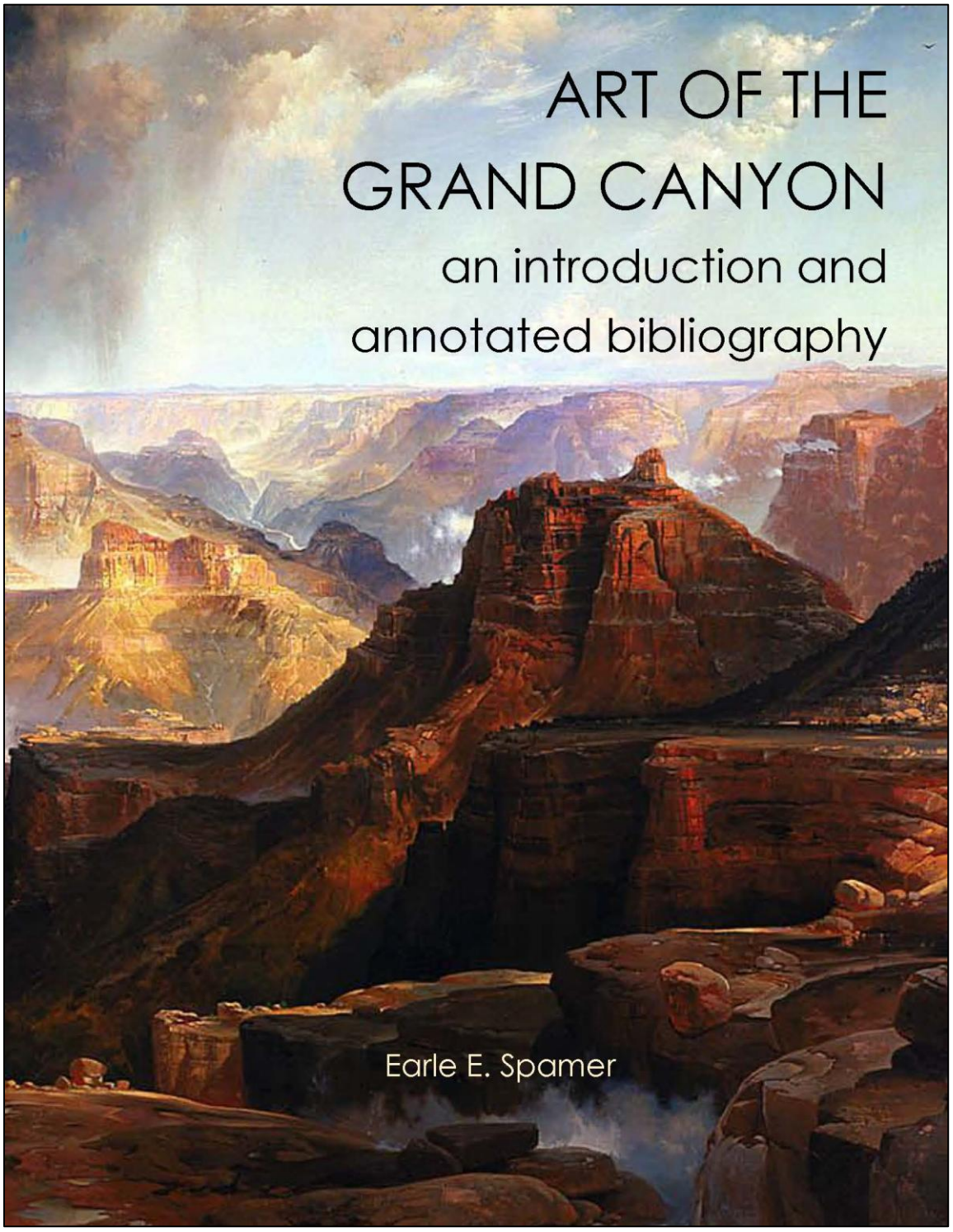
ART OF THE
GRAND CANYON
an introduction and
annotated bibliography
Earle E. Spamer

CHAPTER 6

ART OF THE GRAND CANYON

AN INTRODUCTION AND ANNOTATED BIBLIOGRAPHY (2023)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2023/05/Artwork.pdf (21 MB, 356 pp.)

PREFACE

ART OF THE GRAND CANYON is a historical and bibliographical resource, but it also means to be an "interesting read" specifically for the audience of Grand Canyon historians and aficionados. The Introduction is an admittedly arbitrary and teasingly brief primer of Grand Canyon art for readers who may not be very familiar with the subject. It highlights some usual and some appealingly unusual aspects about well-known and obscure artists alike, and a few of their pieces. It also finds some new perspectives and makes a few comparisons that might be thought-provoking, perhaps unrealized.

The annotated bibliography gathers citations for publications, beginning in 1853, that in some way mention or illustrate the work of Grand Canyon artists between 1851 and 2023. It serves as a documentary effort that confirms the breadth and depth of artistic interest in the Grand Canyon. It also introduces numerous artists who have not had the privilege of being "recognized,"such as those whose work was contributed "on the fly" to various journals and magazines, who are not acclaimed artists in their own right.

There seems to be no end to artists' interest in an admittedly challenging subject—the canyon—and the appearances of these works in magazines and books, whether only by mention or illustration, maintains a steady pace. There are many "Grand Canyon art books," too. One has only to look at the front matter or specific chapters within them to find information about, and examples of, the work of renowned Grand Canyon artists—for example, Thomas Moran from the "old school," Bruce Aiken from the present, and Gunnar Widforss in between—all of them as different in concept, media, and perspective as there are moods of the canyon itself.

To improve the bibliographical take of all this (easy enough to say) requires an even more ambitious search than that represented by the arbitrarily abridged *Art of the Grand Canyon*. Hunting down individual pieces of art that are cited or appear throughout publications over more than a century and a half, to be found as much by serendipity as through reading and referrals to indexes, will be a monumental task. Whether they be woodcuts and engravings,

delightfully impressionistic paintings and drawings, or three-dimensional products, there are far more than is implied by the relatively meager number of citations in this bibliography. *Art of the Grand Canyon* is a new contribution to the history of the Grand Canyon; one that is hopefully interesting for things in it that may not have been realized even by its Grand Canyon audience, and in its widely ranged accounting for the variety of things that have been published that have something to do with Grand Canyon art. And it should be an obvious inspiration for other work.

The annotated bibliography is an outgrowth of a considerably larger bibliography of the Grand Canyon and lower Colorado River regions in the U.S. and Mexico begun in 1974. Its editions have been available since 1981 in print and in various digital formats—now as searchable PDF documents at Raven's Perch Media, https://ravensperch.org, which may be freely downloaded and which have a liberal reproduction and fair use policy. The annotations within the art bibliography, most of which also appear distributed throughout the larger bibliography just mentioned, provide information that specifies just what is provided in the cited publications; they assist users in determining whether or not a particular citation may be of interest to a task at hand. Part 2 of the present bibliography arranges pertinent citations by the names of the artists. These are the ones that have thus far been found in publications; intuitively, there are far more.

It is beyond the purpose of this project to offer criticism; its objective is to present a motivatingly different introduction to Grand Canyon art, and to make published information known. As more and more items are found, they will naturally continue the documentary effort, but surely they will also expose new or forgotten works that run the gamut from monumental to distressingly poor. Anyway, the Grand Canyon always beckons—challenges—those who come to portray it with brush, pencil, crayon, or chalk, even with media such as fabric, clay, glass, and metal.

Today, the historic Kolb Brothers Studio of Emery and Ellsworth Kolb at the village of Grand Canyon on the South Rim is managed by the Grand Canyon Conservancy; the property belongs to the National Park Service. The tall, spartan room that served as an auditorium—where for decades Emery

narrated, thousands of times, the motion picture film he and his brother had made during a historic run down the Colorado River in 1911–1912—is now used as a venue for art exhibits, including more recently the annual Grand Canyon Celebration of Art. Emery lived at the studio from 1906 until his death in 1976. Anyone who has had the privilege of viewing the canyon from the downstairs sitting room (the building is, incidentally, "upside-down," its foundation below the rim of the canyon such that one enters at the top) has had a view of one of the most extraordinary picture-window scenes anywhere.[2] The Kolbs both were photographers, but after a falling out, Emery "won" the studio in a coin toss, and he continued with the business, a significant part of which utilized a small window on the west side that overlooks the Bright Angel Trail. For years, Emery photographed strings of mule-mounted tourists who halted there to have their pictures taken, prints of which were delivered later in the day (for a charge) as a memento of their exciting trail trip into the canyon. At the nearby El Tovar Hotel, built by the Santa Fe Railway, one once could browse through the fine art for sale in a gallery there; and of course, the Hopi House adjacent to the hotel, also a Santa Fe tourist draw, to this day is a place where artwork can be purchased.

Art of the Grand Canyon cannot in any way be seen as offering an inventory of Grand Canyon artwork. There are just so many pieces in existence, which have not even been mentioned in print, that it is impractical to attempt such a compilation. Noticeably, in the citations of the bibliography there are references to many works of art that are not mentioned by title, so neither can this volume even serve as a catalogue unto itself. There are far more Grand Canyon works of art in existence, too, never noticed in publications. The predominant number of them still have copyright protection until decades after the lifetime of the artists, or reproductions of older unique works are shielded

[2] See for example the Kolb photo online, https://cdm16748.contentdm.oclc.org/digital/collection/cpa/id/70948/rec/ (Northern Arizona University, Cline Library, Colorado Plateau Digital Collections, "Grand Canyon, view from the window of the Kolb Studio", 1930s (NAU.PH.568.6668) (last accessed April 15, 2025). The national park, in cooperation with the Grand Canyon Conservancy, now sponsors a rotating roster of Artists in Residence. Perhaps one of them might be inspired to re-express the spectacularly framed view of the sitting room, which by its very existence begs for an audience. Or perhaps, it is sacrilege to make the attempt, it once having been a private setting.

by rights of current ownership if they have not been yielded to the realm of works in the public domain.

So, *Art of the Grand Canyon* is a historian's general guide to the subject, based on material that is in the public domain. It hopefully fields an appreciation for the fact that there is a tremendous amount of work in existence that is not generally known. If one still yearns for a truly comprehensive listing of all of Grand Canyon art, daunting as the idea sounds, one may take a great deal of inspiration from Alan Petersen's *Gunnar Widforss Catalogue Raisonné Project* (https://www.gunnarwidforss.org). Although that project continues to uncover all of Widforss's worldwide work, principally in watercolors, it embraces a very large number of Grand Canyon pieces, for which the artist is justifiably well known.

Delight in the history, revelations, and ideas that follow herein. And discover in the annotated bibliographies the things that have been published, which comprises a documentary record, but read them also to think about future projects about the artists of Grand Canyon—and that marvelous work of art itself, always just called

"The Canyon."

INTRODUCTION

“Try again, Daingerfield.”

THE GRAND CANYON has been the subject of art since 1851, when the North Rim was first glimpsed and drawn from a distance of some sixty miles by an expedition-attached artist, Richard Kern. The main body of the canyon did not become the subject until 1858, at the hands of two more expedition-attached artists, Balduin Möllhausen and Friedrich Wilhelm von Egloffstein. Truly expressionist works featuring the canyon, and places in and around there, finally were produced by Thomas Moran and others, in the early 1870s, although many of Moran’s first Grand Canyon works were commissioned products to illustrate John Wesley Powell’s various articles and reports about his Colorado River expeditions and topographical surveys of the lands thereabout.

Thomas Moran, regaled as the premier Grand Canyon expressionist artist, first arrived there in 1873 on the North Rim with the Powell survey, where he saw the canyon at some of its most spectacular viewpoints. He moodily, and sometimes overimaginatively, delineated various scenes for Powell’s work, occasionally basing his images on or assisted by expedition photographs (especially for places he had not been himself), which were transformed into woodcuts and lithographs. He also produced many paintings of the canyon for his own, and he continued to return to the canyon well into the twentieth century. Sometimes, he even modified older paintings to reflect his newer impressions of the subject. His Grand Canyon efforts had been launched suddenly into public and partisan renown when in 1874 the U.S. Congress authorized a $10,000 payment to Moran—more than a quarter of a million dollars in 2023—for *The Chasm of the Colorado*, a 7-by-12-foot masterpiece that was hung in the U.S. Capitol with its companion, the year-old ten-thousand dollar piece, *The Grand Cañon of the Yellowstone*. Legions have since tried to present Arizona’s Grand Canyon on canvas and paper, even with less usual media like fabric, clay, glass, and metal; many with resounding critical success, others not so much.

Fig. A. Santa Fe Railway advertisement, placed widely in magazines around 1908–1909.

In November 1910, a group of canyon–art celebrants were genteelly conveyed to the Grand Canyon on a private car of the Santa Fe Railway, for the express purpose of painting the canyon (for themselves, of course, but also gathering for the railroad some pieces with which to drum up business for years afterward). They were Elliott Daingerfield, Thomas Moran, DeWitt Parshall, Edward Potthast, and Frederick Ballard Williams. Accompanying them were Mrs. Daingerfield, Mrs. Parshall, and Moran's daughter, Ruth. Representing the commercial undercurrent were Messrs. Charles and Gustave Buek of New York (Gustave was vice-president of the American Lithographic Company, who is said to have suggested the excursion in the first place) and their wives. Also traveling with the party were the art patrons Mr. and Mrs. Giles Whiting of New York, Mr. and Mrs. W. H. Simpson of Chicago, and Mrs. George W. Stevens, wife of one of the first directors of the Toledo (Ohio) Museum of Art.

It was Gustave Buek who humorously engaged the famous artists. Nina Spalding Stevens, who wrote about the pilgrimage and provided a few photographs of the painters at work at the canyon, remarked, "One subject started by Mr. Buek as a jest became a prolific source of argument. 'Well, what *is* Art?' he asked one morning when there seemed to be no chance of agreement. This became a by-word and never failed to bring its laugh."[3] The works produced during and after the trip were displayed in galleries and were sought by collectors. The Grand Canyon group thus inaugurated what became known as the Society of Men Who Paint the Far West (later made potentially more politically correct as the Society of Painters of the Far West, but which only added more men, George Inness, Jr., George McCord, William Ritschel, and Joseph Henry Sharp).

Oddly enough, there were artists who supposedly just would not go to the canyon. William Keith "refused to travel; his friends would arrange trips for

[3] Nina Spalding Stevens, "A Pilgrimage to the Artist's Paradise," *Fine Arts Journal*, Vol. 24, no. 2 (February 1911), pp. 105-113. [The contents page for the February issue misprints the volume number as 25.] An offprint, possibly with an addition, was separately produced, *Souvenir of a journey to the Grand Canyon of Arizona, the artist's paradise: a story of a pilgrimage from New York City made by five artists and their friends, November, Nineteen Hundred and Ten. Written by Mrs. Nina Spalding Stevens* (Print of the Fine Arts Journal Press, Chicago), paginated 105-117.

him to the Grand Canyon, Yosemite, and other beauty spots in the west, which have inspired artists to great effort [*sic*] since their discovery, and at the last moment Keith would refuse to go."[4] Soon, wags began to leap on the perceived difficulties of representing the Grand Canyon in art, with this particular story reappearing in different venues and variations over the years: A "Doctor of Theology" wondered whether "man will yet unravel the riddle of life," reflecting, "Perhaps we shall feel as did the famous artist, who went thither quite confident he could capture the glories of that scene for his canvass [*sic*]. He came away without unpacking his brushes. When asked for an explanation, he said, 'I dared not insult God.' "[5]

Despite acclamations, it seems that with time the Grand Canyon had become a bit "too much," that every exhibition really did not have to have a piece, or a half dozen, by artists who expressively splashed the canyon's colors and forms across canvases. In 1918, Lena M. McCauley warned friends in Chicago, who had proposed an exhibition, that they "should begin with native resources in painters . . . from local studios. As its purpose is to be educative, the spectacular features of the Grand Canyon paintings by the Painters of the Far West . . . need not be given the major space."[6] Even on the heels of the inaugural trip of the "Men," Elliott Daingerfield in 1911 had suffered the ignominious review of an anonymous critic who visited the Vose Galleries in Boston: "Of the living painters represented . . . Elliot Daingerfield's 'Lifting of the Veil—Arizona Grand Canon' is a weird piece of pyrotechnical imagination, hard and brittle in quality, and simply impossible in color. (Try again, Daingerfield.)" [7]

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[4] Everett Carroll Maxwell, "William Keith—the Man and the Artist," *Fine Arts Journal*, Volume 25, no. 3 (September 1911), pp. 135, 137.

[5] This particular version was conveyed in an editorial by M. S. Sommer, "The Preacher's Darkness," *The Lutheran Witness* (published by the "Evangelical Luthern Synod of Missouri, Ohio, and Other States," St. Louis), Vol. 37, no. 19 (September 17, 1918), p. 297. (The item is signed "S." with the writer's full name appearing on p. 304.)

[6] Lena M. McCauley, "Art and Landscape Conservation," *American Magazine of Art*, Vol. 9, no. 5 (March 1918), p. 198.

[7] Anonymous, "Boston," *American Art News*, Vol. 9, no. 32 (June 17, 1911), p. 5. [The piece's title is actually *The Lifting Veil* (1913). In some respects the canyon's physical portrayal resembles that in *The Spirit of the Storm* (Fig. C [p. 7] herein).]

This, however, did not dissuade him. Two years afterward, Daingerfield turned out his startling *Genius of the Canyon*—a nude study in which one must hunt for the canyon in the scene *(*Fig. B*)*. Accordingly, an early notice said: "Elliott Daingerfield recently sold to Moulton & Ricketts from his studio, what he calls, and with reason, 'His masterpiece,' a large picture, entitled, 'The Genius of the Canyon,' now on exhibition . . . in the New York galleries of the firm . . . ." It "evolved in the artist's mind from memories of his recent visits to and study of, the grand canon of the Colorado in Arizona. Thomas Moran, and even Marcius Simons [Pinckney Marcius-Simons], combined, could not have produced a more gorgeous color scheme or fantastic 'vision.' The color is marvelously clear and rich and the work, despite its not easily understandable title, is the strongest the painter has yet produced."[8] James William Pattison had noted that Daingerfield, upon completing the painting, had turned to poetry to commemorate the work:[9]

> Strip from the earth her crust
> And see revealed the carven glory of the inner world
> Templed—domed—silent:—
> The while, the Genius of the Canyon broods
> Nor counts the Ages of Mankind a thought
> Amid the everlasting calm.

The Swedish landscape painter Birger Sandzén, himself a painter of the canyon, later remarked simply that *Genius* "strikes a note of the imaginative and awakens reminiscences of the classical."[10] Earlier that year, W. H. de B. Nelson had revisited the work at a Corcoran Gallery exhibition and crowed, "Mrs. Chauncey J. Blair's *Genius of the Canyon*, by Elliott Daingerfield, is the best work of his that we know; it was a pleasure to see it again. The artist has made the canyon look like a phantom city while preserving the character of the rocks, and in the distance a nude figure lies brooding over the scene. The genius of

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8 Anonymous, *in* Around the Galleries [section], *American Art News*, Vol. 11, no. 19 (February 15, 1913), p. 10.

9 James William Pattison, "Some Important Picture Sales, *Fine Arts Journal*, Vol. 28, no. 3 (March 1913), p. 184 (*Genius* is illustrated on p. 164). [Pattison's typographical layout differs.]

10 Birger Sandzen, "The Southwest as a Sketching Ground," *Fine Arts Journal*, Vol. 33, no. 3 (August 1915), p. 350 (*Genius* is illustrated on p. 338).

Fig. B

The Genius of the Canyon, by Elliott Daingerfield (1913)
oil on canvas, 36 × 48 inches
Presently held by the Morris Museum of Art, Augusta, Georgia.

Here, Daingerfield played on what for generations has been a foundation of writers' enthusiastic and romantic descriptions of the Grand Canyon—the investiture of monumental works of human architecture among the innumerable landforms in the canyon.

https://commons.wikimedia.org/wiki/File:Elliott_Daingerfield_-_The_Genius_of_the_Canyon_(1913).jpg
(Wikimedia Commons, last accessed April 13, 2025)

the canyon is not particularly good, but the rest of the picture is delightful."[11] It seems, though, that Nelson had forgotten what the Grand Canyon looks like, and in his commentary he switched the ethereally distant architecture with the foreground vision of genius. In 1920, the painting was resold "for $15,000 cash [more than a quarter million in 2023] to a wealthy collector from the Middle West."[12]

Nor was this even Daingerfield's first "nude" Grand Canyon study. About 1912 he had painted *The Spirit of the Storm*, which more explicitly, but still teasingly, reveals the canyon in the scene *(see* Fig. C*)*.

For Grand Canyon artists, the twentieth century began as vigorously as the nineteenth had ended, partly due to the longevity of the master, Thomas Moran. Photographic picture books, however, began to displace less easily accessed gallery-meant paper and canvas portrayals of the canyon. "Parlor travelers" were consumers now. And the actual traveling public was targeted, too, with text and photo books turned out in the tens of thousands by the Santa Fe Railway, luring readers with the ease of rail access right to its South Rim accommodations. Later, the Union Pacific Railroad promoted longer (bus-connected) links from Utah to its lone North Rim property. At the South Rim, photo books were produced by the pioneer tourist business, Verkamp's. Not far from that busy place was the photography business of Kolb Bros. that briefly published photo books to complement their monopoly on trail-ride line-up photos. Then there was *Through the Grand Canyon from Wyoming to Mexico* (Macmillan, New York, 1914), the long-in-print book by Ellsworth Kolb (and sold and signed by the thousands by Emery throughout his life right from the Kolb Studio); the adventures were illustrated by views of the wild scenery and derring-do of their solo movie-filming expedition down the Green and Colorado Rivers in 1911–1912.

[11] W. H. de B. Nelson, "Contemporary exhibitions of modern art," *The International Studio*, 54(216) (February 1915), p. cx.

[12] Anonymous, "An Expensive Canvas, *in* The American Art Student [section], *The Touchstone and The American Art Student Magazine* (Mary Fanton Roberts, Inc.), Vol. 7, no. 4 (July 1920), p. 331.

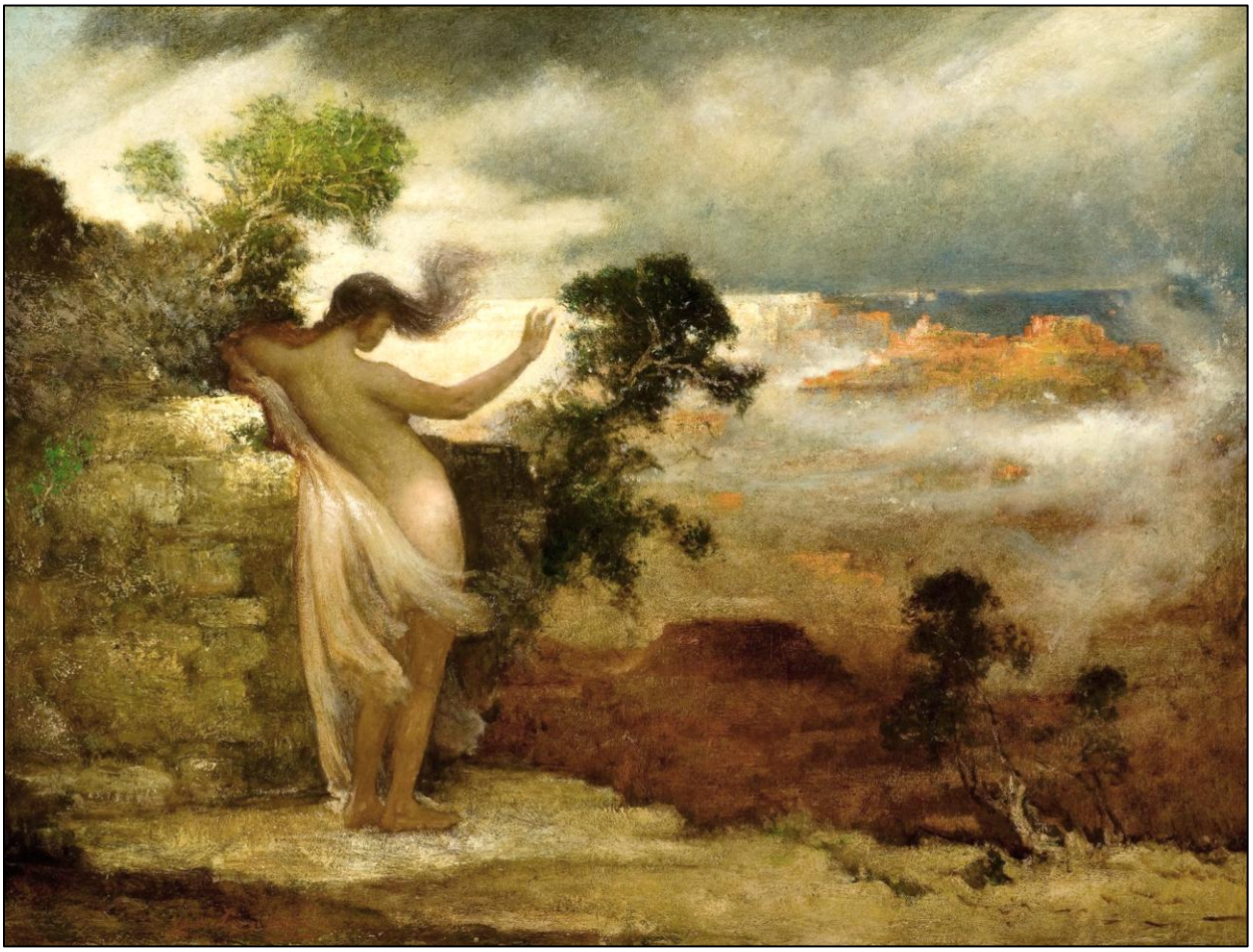


Fig. C

The Spirit of the Storm, by Elliott Daingerfield (*ca.* 1912)

oil on canvas, 36 × 48 inches

Presently held by The Reynolda House Museum of American Art, Winston-Salem, North Carolina

https://commons.wikimedia.org/wiki/File:Elliott_Daingerfield_-_The_Spirit_of_the_Storm_(c.1912).jpg
(Wikimedia Commons, last accessed April 13, 2025)

Displaced as the artists were, they continued to arrive at the Grand Canyon, painting and drawing their ways into the collections of art aficionados and museums. One has only to browse through the present bibliography to witness the comings and goings of some of them. It was not until later in the twentieth century that artists again began to be prominent on the canyon's rims and in its depths. In 2009, the Grand Canyon Association (now the Grand Canyon Conservancy) began its annual "Grand Canyon Celebration of Art" exhibition and sale, attracting artists widely; and they sponsor as well the Grand Canyon National Park's program of Artists in Residence, which embraces more forms of creativity than just those that are pictorial.

With the twentieth century's artists have come more ambitious styles of expression. Perhaps the greatest of Grand Canyon's watercolorists was the Swede, Gunnar Widforss, who just about inhabited the canyon at times during his life, even dying suddenly while driving his car near El Tovar on what ironically was to be his last canyon trip, in 1934, limited by the health concerns of working at the high altitude of the rims. (He was buried there, in the Grand Canyon Cemetery.) One has only to compare the likes of Widforss to the late-century's Bruce Aiken, Ed Mell, or David Hockney to begin to appreciate these later artists' vigorously new creations and the media they employ. And there are lots more, too, as one may gauge by this bibliography. Many of them of course deserve their own in-depth studies, which surely will come. Widforss and Aiken have seen successful appreciations in books and exhibits devoted to them (Widforss is also the sole subject of Alan Petersen's very ambitious gathering, the *Gunnar Widforss Catalogue Raisonné Project*), and Hockney's works have rounded the globe in successful exhibitions.

One section from *Art of the Grand Canyon* is reproduced on the following pages (retaining its original figure numbers) to illustrate some of the novel perspectives gathered up in the Raven's Perch publications.

***Pages 59–75 from* Art of the Grand Canyon . . .**

REUSING & REIMAGINING ILLUSTRATIONS

It is no surprise that illustrators have reused and redrawn many inspiring Grand Canyon images for use in new venues and formats. The sampling on the next several pages portrays a few examples for an audience of canyon historians and aficionados, a focused introduction of a sort to the fascinating history of artistic reillustration.

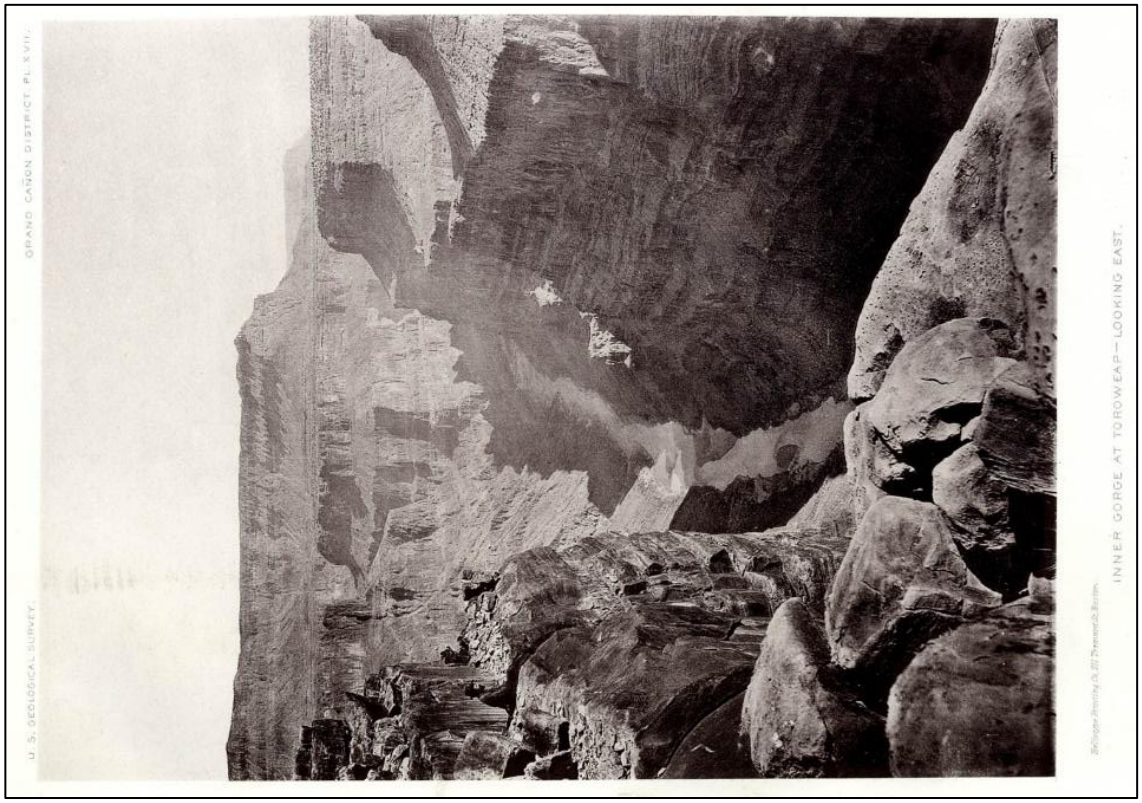
Figs. 2A–2D *(next two pages)* show the same scene in a variety of types and abilities, in lithography, photography, woodcut engraving, and painting; chronologically by year of publication:

A **"The Grand Cañon, looking east from To-ro′-weap."** J. W. Powell, *Exploration of the Colorado River of the West and its tributaries* (U.S. Government Printing Office, Washington, 1875), Figure 32. [Delineated by Thomas Moran, after a photograph probably by John K. Hillers taken in 1871–1872. Moran also had visited Toroweap in 1873.]

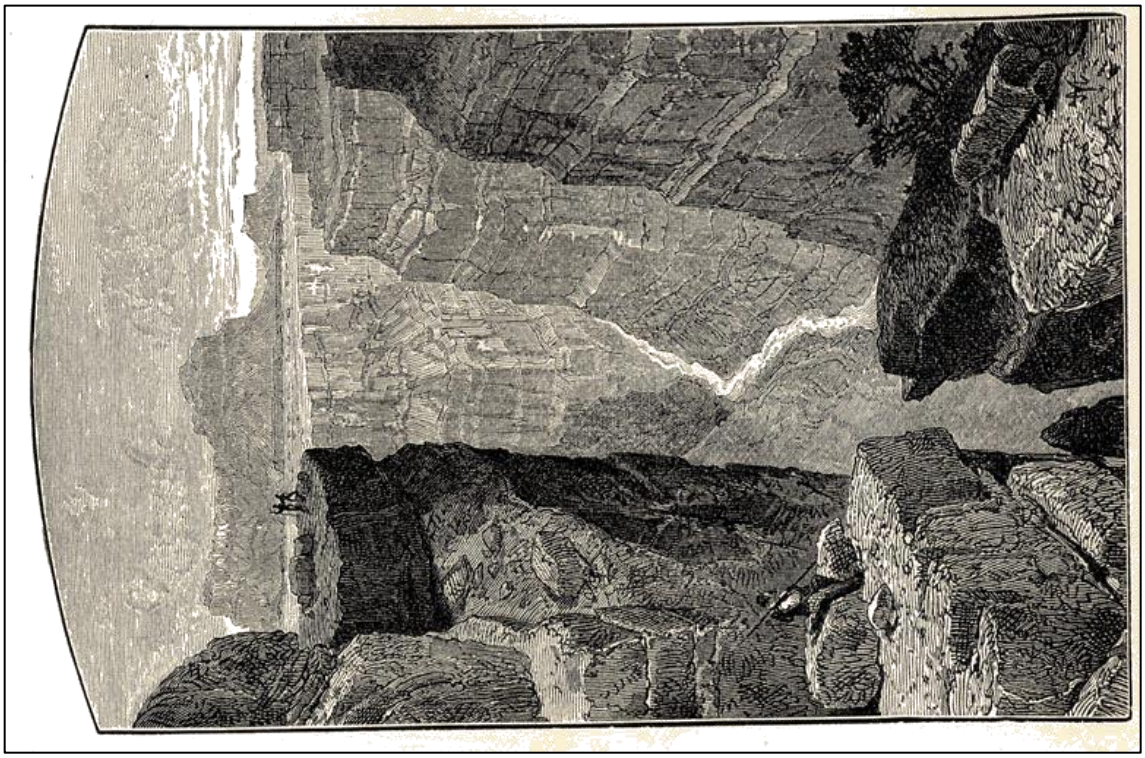
B **"Inner Gorge at Toroweap—Looking East."** Clarence E. Dutton, *Tertiary History of the Grand Cañon District* (U.S. Geological Survey Monograph 2, 1882), text, Plate XVII. (Heliotype Printing Co., Boston.) [Heliotype reproduction of a glass-plate photograph probably by John K. Hillers.]

C **"Przepaść w wielkim Kanonie rzeki Colorado pod Toroweap."** [In Polish; *transl.* 'The abyss in the great Canyon of the Colorado River below Toroweap'])" S. Orgelbranda Synów [firm], *S. Orgelbranda encyklopedja powszechna z ilustracjami i mapami. Tom IV. Od wyrazu Constans do Dżyhad* (S. Orgelbranda Synów, Warszawa, 1899), p. 418 (illustrating the entry for "Dolina" [valley], "Fig. 1"). [*Volume title transl.*: 'S. Orgelbrand's universal encyclopedia with illustrations and maps. Volume IV. From the word Constans to Dżyhad'.]

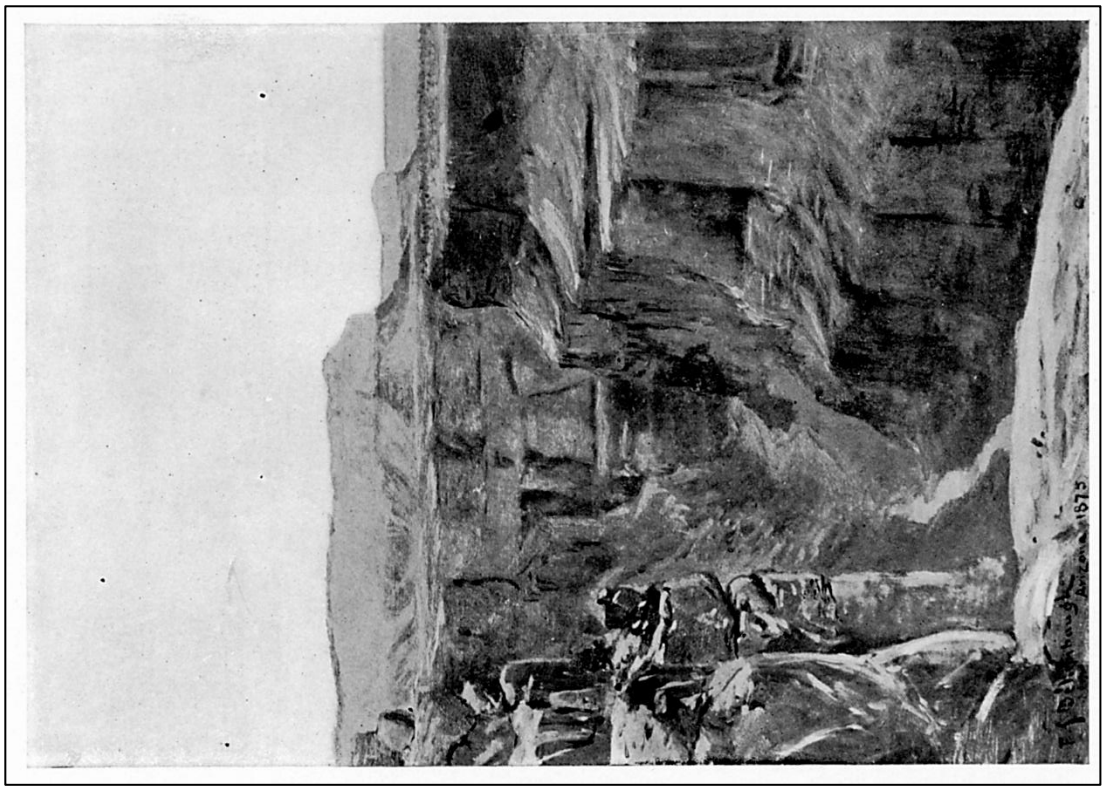
D **"Looking up the Grand Canyon, at the Foot of Toroweap, Uinkaret Division,"** "oil sketch by F. S. Dellenbaugh," dated 1875. Frederick S. Dellenbaugh, *Romance of the Colorado River* (G. P. Putnam's Sons (The Knickerbocker Press), New York and London, 1902), p. 365. [Dellenbaugh had visited Toroweap in that year.]


U. S. GEOLOGICAL SURVEY.
GRAND CAÑON DISTRICT. PL. XVIII.
INNER GORGE AT TOROWEAP—LOOKING EAST.

B



A



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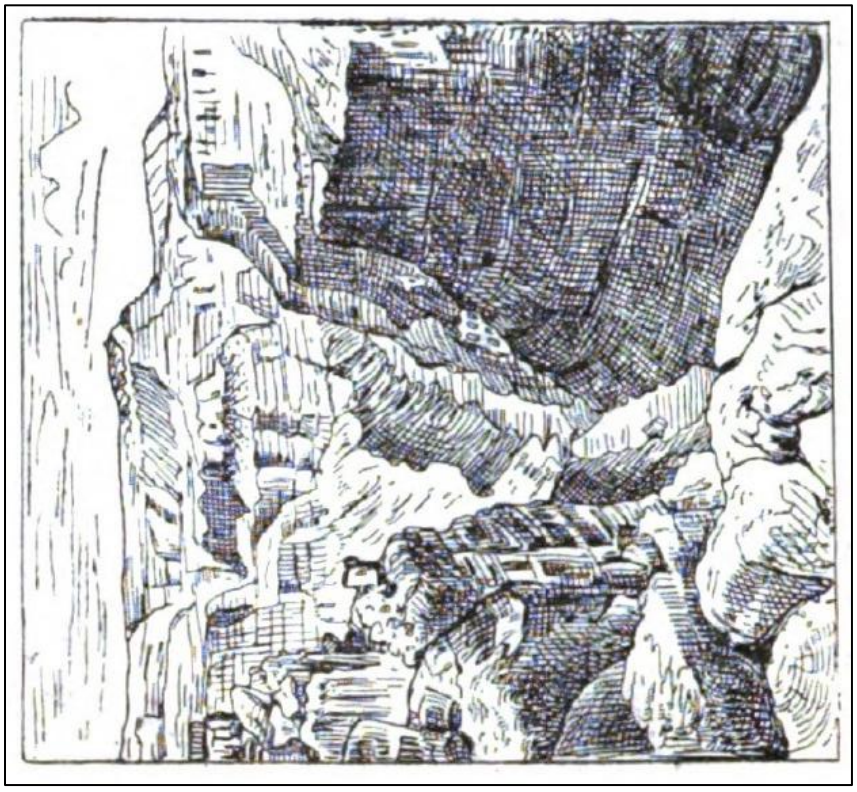
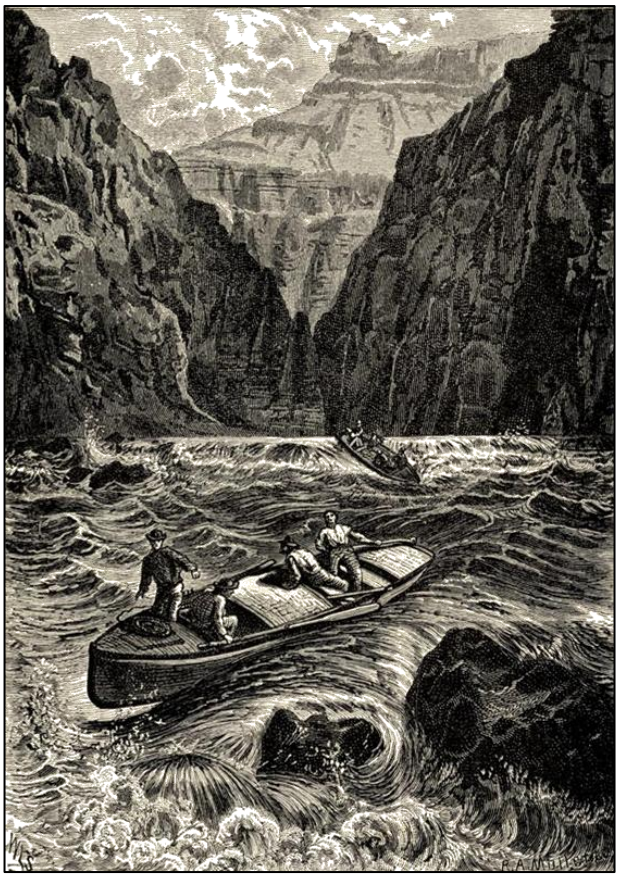
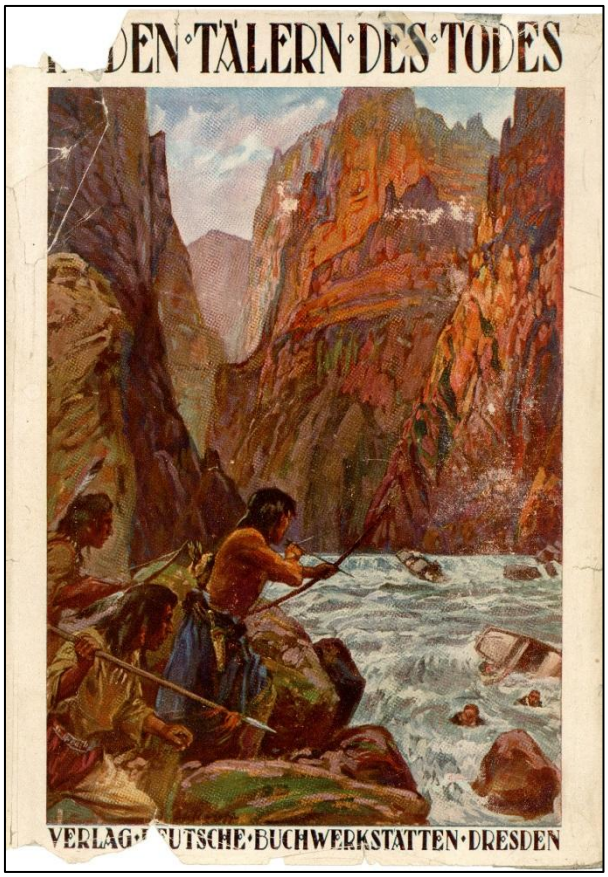


C

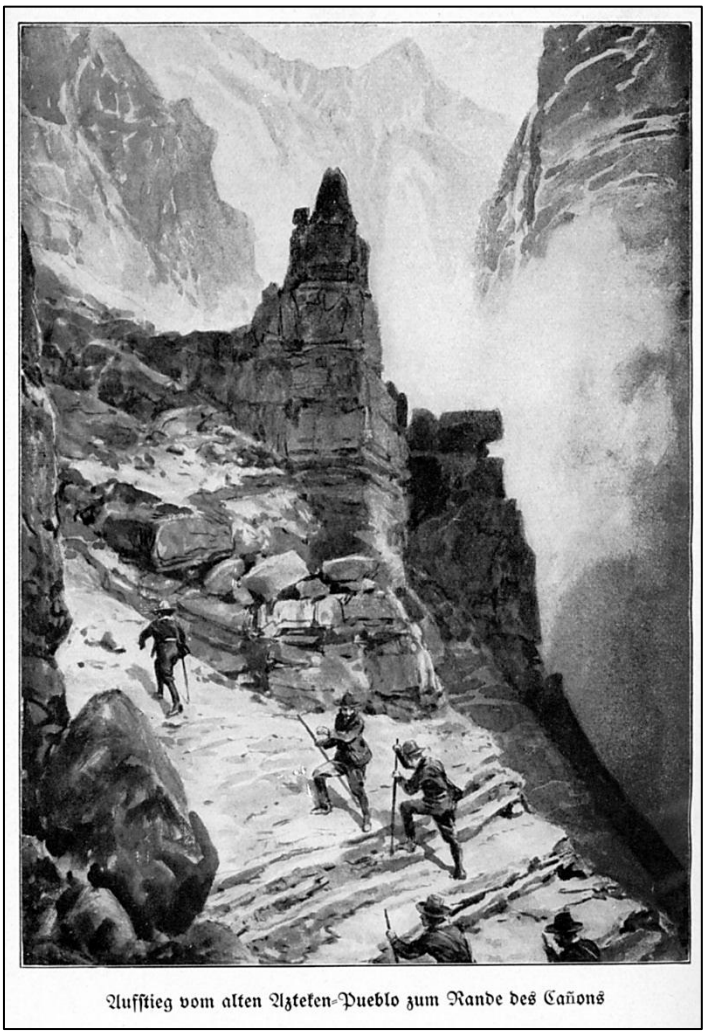




▲ **Fig. 2E–1.** In 1922, the German actor, writer, and sometimes pulp novelist **Otfrid von Hanstein** edited a young-reader title, *In den Tälern des Todes : die abenteuerliche Erforschung der Wunderwelt am Colorado durch J. W. Powell* [*transl.* 'In the valleys of death: the adventurous exploration of the wonderful world of the Colorado by J. W. Powell'] (Verlag Deutsche Buchwerkstätten, Dresden). It is a novelized free translation of Powell's *Exploration of the Colorado River of the West and its Tributaries* (1875). The plates and illustrations throughout are redrawn from Powell and other sources, with fanciful embroiderments to highlight action and situations in the text (the one-armed Powell is even depicted unimpaired). The "Indian attack" shown here is wholly contrived. *The dust jacket illustration is not used inside the book.*

Above are shown the dust jacket *(right, artist not credited)* and *(left)* Powell's illustration that seems to have been the principal model for it: "**Running a Rapid**," Powell, Figure 28, delineated by "WLS" (probably William Ludwell Sheppard) and engraved by "R. A. [Richard A.] Muller".)

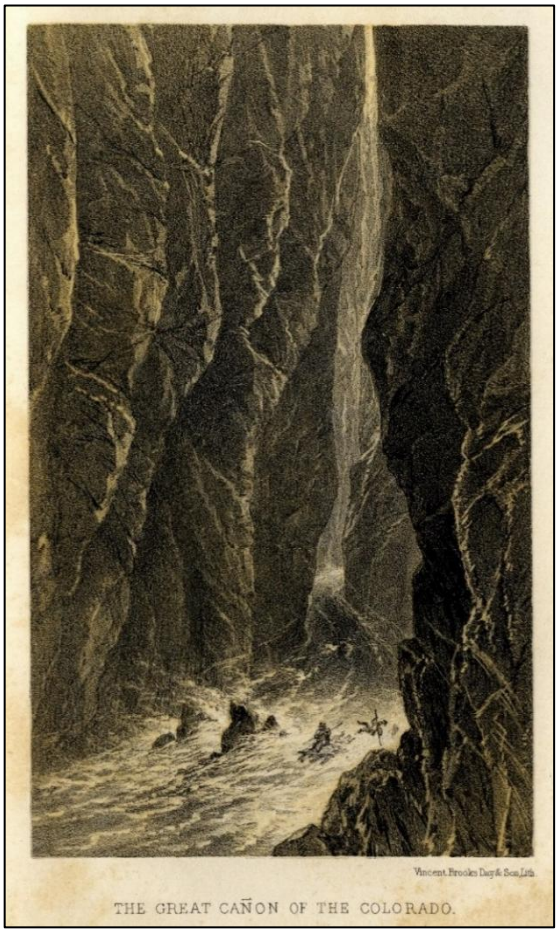
▲ **Fig. 2E–2.** Elements of the Hanstein dust jacket illustration also seem to have been borrowed from **"Wreck at Disaster Falls"** (Powell, 1875, Figure 10, a scene on the Green River, delineated by Thomas Moran, engraved by Bogert).



Aufstieg vom alten Azteken-Pueblo zum Rande des Cañons

▲ **Fig. 2E–3. "Aufstieg vom alten Azteken-Pueblo zum Rande des Cañons"** [*transl.* 'Ascent from the ancient Aztec pueblo to the rim of the canyon'] (Hanstein, 1922, facing p. 153). Lithograph after Powell (1875). Though cropped, the illustration is largely faithful to Moran's original (in Powell), with some repositioning of the men and the removal of the man hailing at the top of the slope.

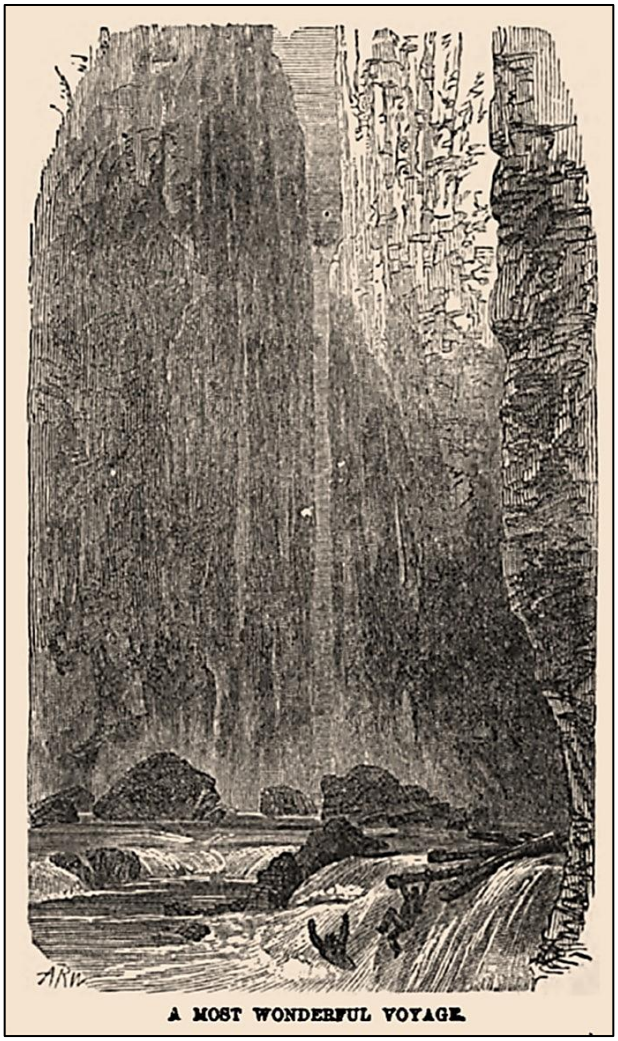
▲ **Fig. 2E–4. "Climbing the Grand Cañon."** (Powell, 1875, Figure 34.) Delineated by Thomas Moran, engraved by F. S. King.



On September 7, 1867, **James White** was rescued from a crude log raft in the Colorado River at Callville, Nevada, suffering severely from exposure and starvation. He said he had been all the way through "the Big Canon," the sole survivor of three who had been prospecting above the San Juan River. His story has been a point of discussion and debate ever since. It reached public attention quickly, and the prolific illustrators of the period grasped (and imitated) the illusory imagery as tightly as White had held onto his raft.

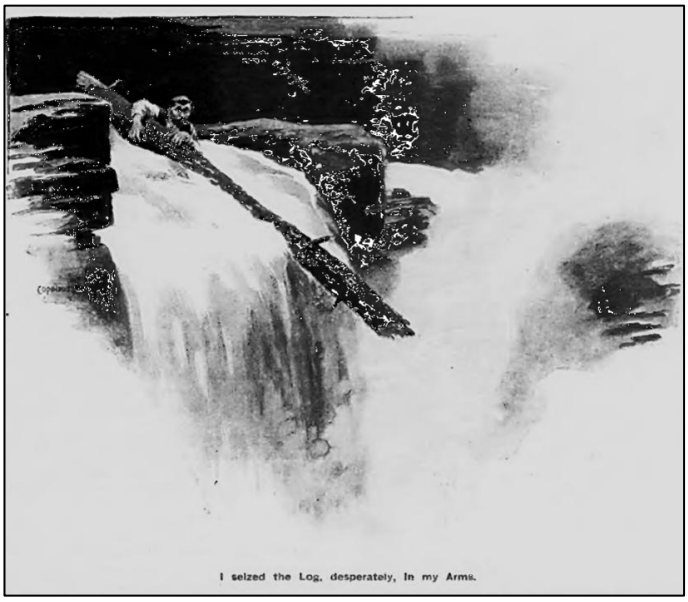
▲ **Fig. 2F–1.** *(Above left)* William A. Bell's *New Tracks in North America* (Scribner, Welford and Co., New York, 1870) depicted James White's raft in the imagined defile of the Grand Canyon, at the moment when his companion, George Strole, was lost overboard in a rapid, losing his hat, too *(detail in inset, right ►)*.

◥ **Fig. 2F–2.** *(Above right)* The same scene was poorly and even more gloomily refigured for Alfred R. Calhoun's chapter, "Passage of the great cañon of the Colorado" in *Wonderful Adventures: a series of narratives of personal experiences among the native tribes of America* (various imprints in America and Europe, no date [1870s]).



◄ **Fig. 2F–3.** In this crude version for Albert D. Richardson's *Beyond the Mississippi* (Hartford, Connecticut: American Publishing Co. [etc.], 1869), with its mighty peculiar legend, White's raft has fairly disintegrated and both men are precipitated into the maelstrom *(detail above ▲)*. The route through the gorge has effectively disappeared, unless the weird waterfall-like feature in the center is meant to be the improbable course of the unfortunate rafters. (Artist A. R. Waud, engraver J. T. Speer; credited on p. viii of volume.)

► **Fig. 2F-4.** "Down the Grand Cañon," a young-reader tale by A. Ellbrace, in all probability fashioned after the James White account, was published in three installments in *The Youth's Companion* in 1894 (Vol. 67, July 12, p. 319, July 19, p. 327, July 26, p. 335). The series was illustrated with imaginative scenes of action such as the one here where the hero, "George Robinson," is reduced to grasping a single log—"I seized the Log, desperately, in my Arms." The artist may have signed, in tiny lettering midway on the left, "Copeland."



▲ **Fig. 2G–1. 1861 "Big Cañon."**

Lithograph by J. J. Young, from a sketch by F. W. von Egloffstein. *In* Joseph C. Ives, *Report Upon the Colorado River of the West, Explored in 1857 and 1858 . . . .* (U.S. Government Printing Office, Washington, 1861), Part I (General Report), Plate IX.

One of **F. W. von Egloffstein**'s problematical scenes from the 1858 Ives expedition *(left)** was imaginatively refigured *(below)* for use in a geography a decade later. The newer view found a base for the mysterious spire and added the river and a lone boater, in the process also changing the view from a side canyon to one in the river gorge. Note also the even more greatly exaggerated incision of tributary canyons (their courses betrayed by the wriggling maws of chasms on the plateau). In both views Egloffstein's improbable spire rises above the adjacent plateau, though it is made narrower in the later drawing. Even if some of the lithographic stones from the Ives volume had been mixed up with those of another expedition [*see note below*], the scenes still validated the wonders that were written about the Grand Canyon.

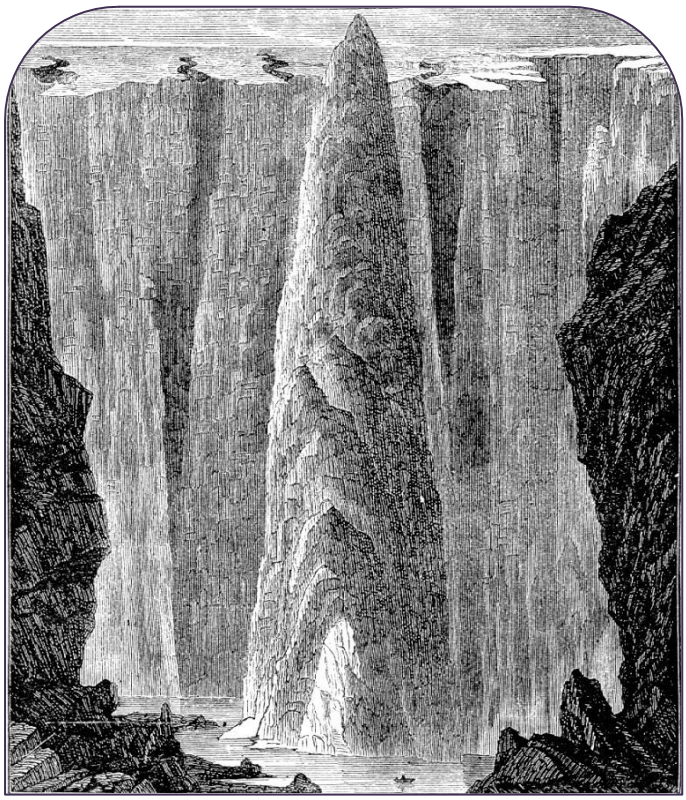
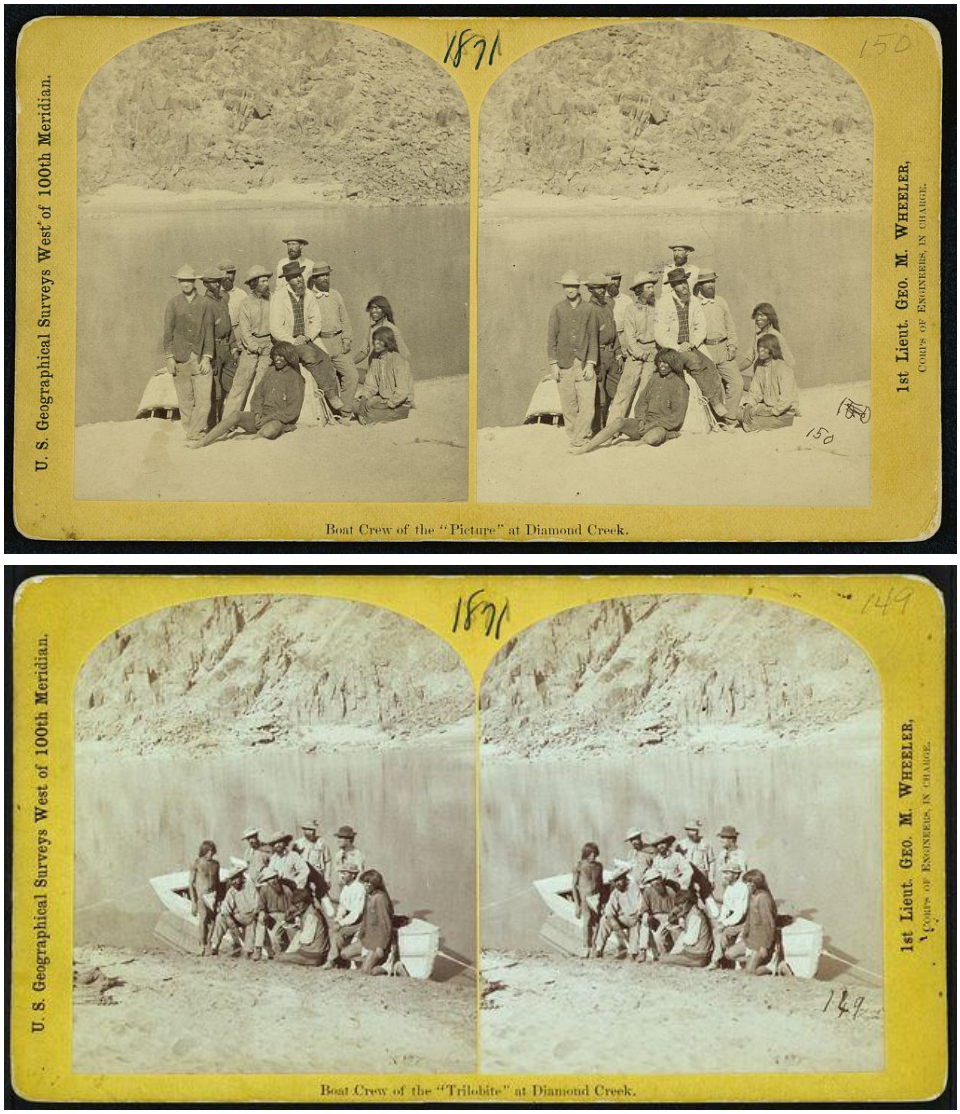


Fig. 2G–2. ▶

1873 "Canons of the Colorado River."
[Artist not indicated.] *In* D. M. Warren (revised by A. von Steinwehr), *An Elementary Treatise on Physical Geography, To Which Is Added a Brief Description of the Physical Phenomena of the United States* (Cowperthwait and Co., Philadelphia, 1873), p. 37.

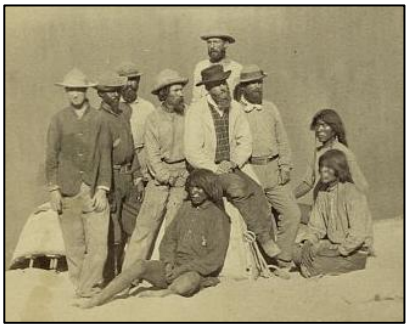
By the time this rendition had been made, John Wesley Powell's exploits on the Colorado River were well known. Thus it was reasonable, if not just for the purposes of staffage, to place a boater on this canyon river—though alone and with some uninformed artistic license in showing the his reflection on limpid water.

***NOTE ADDED HERE (2025):** The Egloffstein illustration has been shown to have been one of a couple in the Ives report that were published there in error, actually portraying Black Canyon in the state of Colorado. See Jeremy Miller and Lena Herzog, "The Long Draw," *Harper's Magazine*, Vol. 324, no. 1940 (January 2012), pp. 50-59, for substantiating data and comparative photography. See also David Miller, "Baron von Egloffstein and the First Published Images of Grand Canyon," in *A Rendezvous of Grand Canyon Historians* (Grand Canyon Historical Society, 2013).



The unnecessary (and thus peculiar) expedition led by **Lt. George M. Wheeler** in 1871, moving *upstream* from the lower Colorado River into Grand Canyon to reach Diamond Creek, was intended to "tie together" the Ives and Powell expeditions, even though there was nothing that was unknown about these reaches of the river. It was nonetheless beautifully photographed by Timothy H. O'Sullivan, whose stereoscopic views included these two: ▲▲ **Fig. 2H–1** *(top)* **"Boat Crew of the 'Picture' at Diamond Creek"** and ▲ **Fig. 2H–2** *(bottom)* **"Boat Crew of the 'Trilobite' at Diamond Creek."** These images were used to produce a lithograph of the party after their arrival at Diamond Creek, which contrives to create a unified scene (**Fig. 2H-3**, *facing page*) that was included in Wheeler's very delayed final report of his survey, *Report upon United States Geographical Surveys West of the One Hundredth Meridian, in charge of Capt. Geo. M. Wheeler . . . . Vol. I. — Geographical Report* (U.S. Government Printing Office, Washington, 1889).

▼ **Fig. 2H–3. "Colorado River Party Reaching Mouth of Diamond Creek. 1871"** (Wheeler, 1889, Plate XXIV). The lithograph borrows from another photograph that takes in the mouth of Diamond Creek from the north and places the boats on the same shore. The man at far left is made out to be sitting in the lithograph, and the man third from left, partly obscured, has been moved to "reveal" him. Native American members of the crew are included; the man on the ground at the right of the left-hand photo has been shifted to the right to balance the groups. Lt. Wheeler is the dapper man seated on the left side, wearing a checked vest and dark hat. (One may also usefully use this scene to see what cannot be seen in Balduin Möllhausen's view at the mouth of Diamond Creek [**Fig. 1C**, p. 14].)



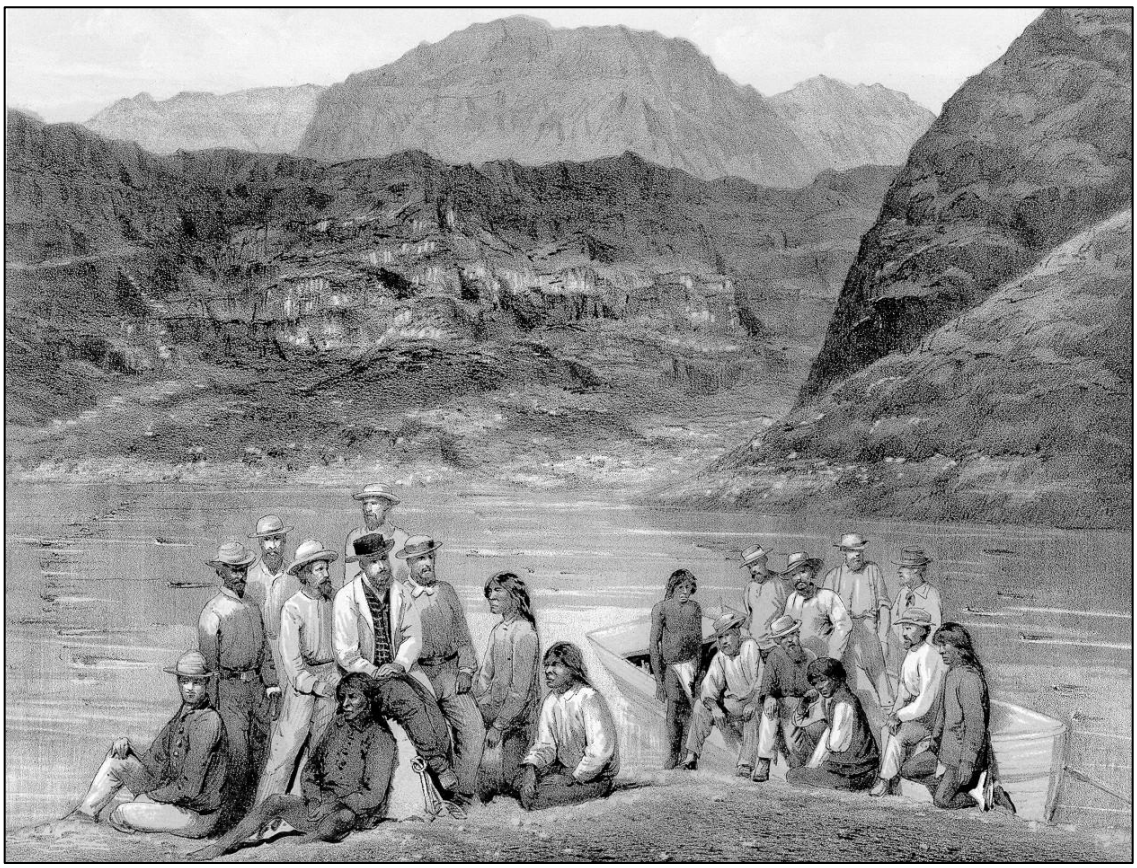


Fig. 2I *(facing page)* ►

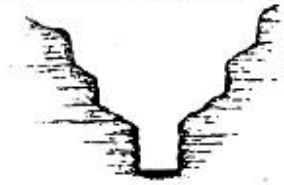
The Colorado River expedition led by **Robert Brewster Stanton** during 1889-1890 was to survey the route for the proposed Denver, Colorado Cañon & Pacific Railroad, which included the entire length of the Grand Canyon. Stanton was also the first to systematically photograph the route, images which have been used to this day for the purposes of comparing changes to the river corridor's ecosystem and the appearance of the river's rapids. When Stanton wrote one of his promotional pieces for the *Engineering News*, however, he relied upon his photographs and *redrawings* by "Burt" of *Engineering News*, a curious mix. The images on the sample page opposite carry the legends, *(top)* "**The Head of the Grand Canon. (Photo 375.)**"; *(middle)* "**In the First Eighteen Miles of Grand Canon. (Photo 385.)**", which is a drawing signed "Burt", "ENG NEWS"; and *(bottom)* "**In the First Eighteen Miles of Grand Canon. (Photo 386.)**" (Stanton, Robert Brewster, "The Denver, Colorado Canon and Pacific Railway Project," *Engineering News*, Vol. 24, no. 42 (October 18, 1890), pp. 341-344, 352-357.)

The artist, Burt, is identified by Charles Whiting Baker in "The Story of 'Engineering News'," *Engineering News Record*, Vol. 78, no. 1 (April 5, 1917), who explained that a staff expansion in early 1887 included "F. P. Burt, a young Canadian engineer with a special artistic talent, [who was] brought to establish the nucleus of an illustration department." Burt also later became an officer of the publishing firm.

This brings our line to Lee's Ferry at the head of the *great* canons of the river—the Marble and the Grand Canon. They are, in fact, but one continuous canon having only an arbitrary division at the mouth of the Little Colorado.

We enter the head of the Marble Canon with a short tunnel through a sharp point, and beyond this for a distance of ten miles the line is upon good slopes of talus, in almost the whole distance underlaid by horizontally stratified rock in place, making a good and permanent roadway.

At this point the canon cuts into a much harder stratum of rock forming a narrow inner gorge with vertical walls next to the water for say 50 to 100 feet up. Above these the walls of the canon slope back in a general cross-section of this form:



In this inner gorge, being so narrow, the difference between low and extreme high water varies from 40 to 95 feet, but from the very nature of the case our line is on the first sloping bench above the inner gorge and well out of the way of the most extreme rise.

THE HEAD OF THE GRAND CANON. (Photo. 375.)

IN THE FIRST EIGHTEEN MILES OF GRAND CANON. (Photo. 385.)

This class of bench-work extends for 7½ miles, ending with nearly 3 miles of good talus slopes. Again the canon narrows up, and we have 11¼ miles of the same cliff bench-work. This extends to Point Retreat, where we left the river on our first expedition.

At Point Retreat, near the middle of Marble Canon, the river makes a sharp turn to the left and then again to the right. At this point the marble stands up in vertical cliffs about 300 feet high from the water's edge, while the sandstones bench back in slopes and cliffs to 2,500 feet in height. Just beyond this the canon is the narrowest, being but a little less than 400 feet wide from wall to wall. The marble rapidly rises till it stands in perpendicular cliffs 700 to 800 feet high, with patches of broken down cliffs forming small benches and talus slopes at their bases. (See Photographs Nos. 332 and 338 in this issue.)

Our line would pass through Point Retreat with a tunnel about one mile in length, cross the river with a single span, from cliff to cliff, and through the opposite point with a shorter tunnel coming out upon the same general class of cliff bench-work.

This section of some ten miles (two above Point Retreat) in Marble Canon is in fact the most difficult to locate and perhaps the most expensive ten miles to construct anywhere upon the whole river. It is necessary to cross the river for the first and only time. The closeness of the marble cliffs offers a very suitable place for a single span bridge. Although expensive, a permanent and first-class line can be located through this ten miles without, at any point, hanging upon the sides of the perpendicular cliffs.

This cliff bench-work continues for some 12 miles, with a tunnel through Point Hansbrough, thereby saving a mile in distance.

From Point Hansbrough to the Little Colorado, a distance of some 18 miles, the canon widens, the marble benches retreat, new strata of limestone, quartzite, and sandstone come up from the river, and the debris forms a talus equal to a smooth mountain slope.

See Photographs Nos. 350, 363, 370 and 372, for illustrations of this section.

At the mouth of the Little Colorado River—though it is only an arbitrary division—ends the Marble and begins the Grand Canon. (See Photographs Nos. 372 and 375).

TABLE OF CLASSIFICATION—MARBLE CANON.

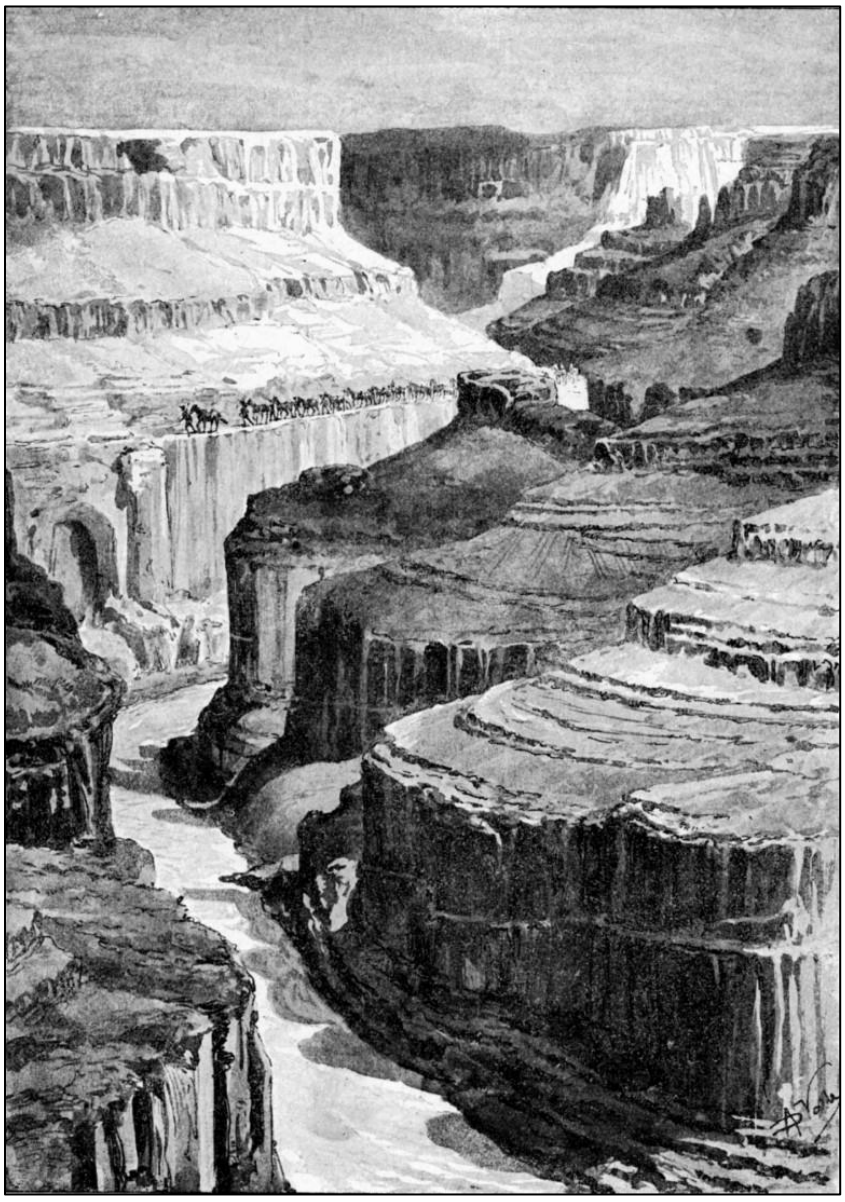
Distance Miles.	General Character of Work.	Photographs Illustrating each Class of Work.
.300	Bottom lands	
18.810	Heavy talus slopes*	Nos 330, 332, 370, 372
.125	Through rock cut	
10.240	Cliff bench work	" 338, 350, 368
.770	Heavy embank., under cliff	
2.375	Tunnels—14 tunnels	
32.510	Total.	

*NOTE.—Under "heavy talus slopes" are placed all slopes of talus and stratified rock in place covered with loose rock and debris.

We now come to the most wonderful part of the whole river route—*The Grand Canon*. In this have been supposed to exist all the terrors for railway construction that would for ever condemn the route. Let us look at it with this in mind, it is only the

IN THE FIRST EIGHTEEN MILES OF GRAND CANON. (Photo. 386.)

▼ **Fig. 2J–1.** This imaginative scene was drawn by **A. Della Valle** to illustrate Emilio Salgari's Italian adventure novel, *La Sovrana del Campo d'Oro* [*transl.* 'The Queen of the Gold Camp'] (Antonio Vallardi, Milano, no date [1919?], facing p. 176). The legend, "**Per dieci minuti fiancheggiarono la roccia, avanzando adagio, adagio . .**" [*sic*] (*transl.* 'For ten minutes they skirted the rock, advancing slowly, slowly . .') refers to action taking place in Chapter 20, "Il 'Gran Cañon del Colorado" (pp. 145-150). This is in reality a vista in Marble Canyon where people are used to the idea that this gorge is a couple of thousand feet deep, yet the line of animals here shown being led along a ledge suddenly reduces the grandeur to something much more of the ordinary.



◄ **Fig. 2J–2.** Della Valle's image *(Fig. 2J-1)* was copied from this scene created by **Albert Tissandier*** that appeared in various contemporary publications; this one is from "Voyage d'Exploration dans l'Utah et l'Arizona, Kanab et le Plateau de Kaibab, par M. Albert Tissandier, 1885," [*transl.* 'Journey of Exploration in Utah and Arizona, Kanab and the Kaibab Plateau, by Monsieur Albert Tissandier, 1885'], *Le Tour du Monde* (Paris), 1886 (premier semestre), p. 367. The figure's legend reads, "**Les Marble Cañons près de Pagump Valley . . . Dessin d'Albert Tissandier, d'après nature**" [*transl.* 'The Marble Canyons near Pagump Valley . . . Drawing by Albert Tissandier, from life'"]. The illustration, when it was reprinted in other contemporary publications, usually appeared with legends that misplaced the locale in Utah. Della Valle's original source is not known.

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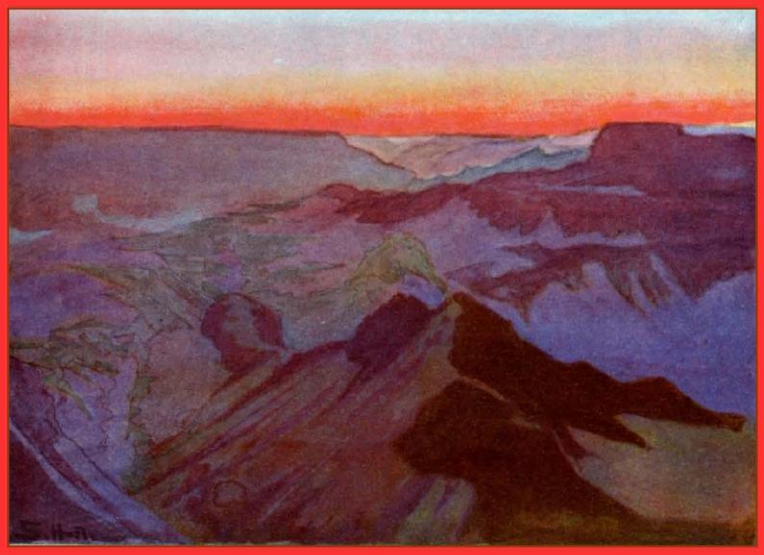
* Tissandier's original art for this scene is a piece drawn with graphite on paper, now in the Utah Museum of Fine Arts, University of Utah, Salt Lake City. Its legend, by the artist, reads, "Les precipices de Marble Canon's près de Pagump Valley (Arizona) 14 Juin 1885" [*transl.* 'The precipices of Marble Canyon near Pagump Valley (Arizona) June 14, 1885'], with an additional note, "Dessin paru dans le Tour du monde (Hachette)" [*transl.* 'Drawing published in Le Tour du Monde (Hachette)'] (Hachette is the publisher's name). This original art has been digitized online: https://collections.lib.utah.edu/details?id=415803&q=Pagump (last accessed April 16, 2023; link not valid in April 2025).

Albert Tissandier also unabashedly borrowed from one of the Grand Canyon art masters, William Henry Holmes. Although the Frenchman had been to Toroweap himself, in 1885, he even copied (crudely and indistinctly) Holmes' small group of mounted travelers halted at a rain pocket *(lower left)*.

▲ **Fig. 2J–3.** "**The Grand Cañon at the Foot of the Toroweap—Looking East**", by William Henry Holmes, in Clarence E. Dutton, *Tertiary History of the Grand Cañon District* (U.S. Geological Survey Monograph 2, 1882), *Atlas*, Sheet VI.

► **Fig. 2J–4** *(facing page)*. "**Canon de Toroweap dans l'Arizona**" [*transl.* 'Canyon of Toroweap in Arizona'], cropped after Holmes by Albert Tissandier, in Tissandier, *Six Mois aux États-Unis: Voyage d'un Touriste dans l'Amérique du Nord, suivi d'une Excursion à Panama.* (G. Masson, Paris, 1886), Plate IV [*transl.* 'Six Months in the United States: Travel of a Tourist in North America, followed by an Excursion to Panama']. Peculiarly, Tissandier's fig. 23 (*not reproduced here*) is an illustration, "Grand cañon, vue prise à l'est de Toroweap" [*transl.* 'Grand Canyon, view to the east at Toroweap'] that perfectly reproduces a Thomas Moran illustration from J. W. Powell's 1875 monograph, even including Moran's monogram *(see herein,* Fig. 2A *on p. 60)*.

SVEN HEDIN



GRAND CANYON

An English Translation of the Original 1925 Edition

CHAPTER 7

"GRAND CANYON" BY SVEN HEDIN

AN ENGLISH TRANSLATION OF THE ORIGINAL 1925 EDITION (2022)[1]

EDITED BY EARLE E. SPAMER [2]

[1] https://ravensperch.org/wp-content/uploads/2022/08/SVEN-HEDIN.pdf (20 MB, 167 pp.)
About the cover illustration: Watercolor by Sven Hedin, 1923, "Fran Navaho Point efter solnedgången" (From Navaho Point after sunset), facing p. 128 in Hedin's 1925 edition. It is a view he painted while at the point also called Desert View (the latter name was formally adopted in 1932). The cover color was adopted to contrast Hedin's own brash color schemes.

[2] For a review of this translation, see Don Lago, "Sven Hedin. 'Grand Canyon: An English translation of the original 1925 edition.' Translated and edited by Earle Spamer." *Swedish-American Historical Quarterly*, Vol. 74, no. 4 (October 2023), pp. 257-260.]

INTRODUCTION TO THE TRANSLATION

SVEN ANDERS HEDIN (1865–1952) was a Swedish adventurer best known for his explorations across the Asian continent and for a tumultuous professional life, all of which is beyond the scope of this book. The publications stemming from his explorations are numerous, and he was also widely known for his popular travelogue for young readers, *Från Pol till Pol* ("From Pole to Pole," published in 1911) that was translated into many languages. But less well known is the entire book that he wrote about his three-week visit to the Grand Canyon in the summer of 1923, based on letters he had sent to his mother. It was published first in Swedish in 1925 with the simple title, *Grand Canyon*; today this is a scarce volume in the antiquarian book market. It was translated into German in 1926 and Russian in 1928. It never was translated into English, until now.

Hedin's trip across America was framed around lectures and visits to academic institutions, although it seems that his itinerary was neither demanding nor one that required particular punctuality. He actually was en route to China, Mongolia and Russia, but was thwarted by political events in reaching his China objectives. In America, we learn here, the famous explorer unexpectedly received the VIP treatment from the Santa Fe Railway and, at Grand Canyon, from the National Park Service and the Santa Fe concessioners there, which appear to have made possible a longer than expected, engaging stay at the canyon—and thus also this book.

He begins *Grand Canyon* with the pleasure of being given a free pass on the Santa Fe Railway and being accompanied by managerial staff from the railroad. He spends some time in describing his trip across the country, taking particular note of the flooding of rivers, geography, and various headlines in newspapers that were received along the line. At the Grand Canyon, he had free accommodation at the Santa Fe's top-class El Tovar Hotel (although he expressed displeasure with the hotel's ground plan). He was also courted and conducted around the South Rim by National Park Service personnel and the Santa Fe's management. Leisure times included dining and chatting with all

those who were in charge, including the park's superintendent, Walter W. Crosby.

At first he was taken on a guided tour to the several usual viewpoints west of Grand Canyon village, then onward to the east to Grand View. He went down into the canyon to stay for a couple of days at the Santa Fe's tourist lodgings, Hermit Camp, sequestered down in Hermit Canyon. As part of the VIP treatment, one night while at Hermit Camp he was treated to specially arranged Hopi Indian dances farther down in the Hermit gorge, around a blazing fire. The Santa Fe people had sent down—actually, they ran down the trail—some of the dancers who had just performed for tourists at Hopi House. (The Hopi rode mules back to the rim the next day.) During his stay at Hermit Camp, Hedin also went down to the Colorado River.

Back on the rim, Hedin was driven to Desert View (Navaho Point in those days) by the Park Service's very own "mule," Miner Tillotson (who did everything at one time or another, eventually even becoming the park's superintendent). Hedin was left by himself in a cabin there, where he gazed, and painted, and gazed some more. The next day he was invaded by noisy tourists in a bus, annoyed by their peering over his shoulder while he painted, and was mightily pleased with the silence following their departure.

An adventuresome trip westward to remote Havasupai Point concluded his South Rim expeditions.

Hedin had expected then to leave the canyon for Los Angeles because he had been told that the South Rim views were superior to those of the North Rim. But against such opinions he was convinced by "a gentleman" to go to the North Rim. He arranged with the Santa Fe people to be conducted across the canyon to Wylie Way Camp, a small, independent tourist camp on the North Rim, and had his luggage sent onward by rail to Salt Lake City, to which city he would then head by car and from where he could proceed to the west coast.

With a Santa Fe concessioner's "cowboy," Sandy McLean, Hedin descended Bright Angel Trail on a mule to Indian Garden. After crossing the older version of the Kaibab Bridge, he was put up at Phantom Ranch, then newly completed by the Santa Fe, but he was not particularly enamored with

it. Phantom Ranch was appealing, he said, but it had a “covered wagon” feel so he moved on the next day to camp out at Ribbon Falls. While at the ranch, though, he was interested in the work of the U.S. Geological Survey’s river-gauge monitor, J. W. Johnson.

Hedin and MacLean rode on up the sketchy trail to the head of Bright Angel Canyon and looped back southwestward to Wylie Way Camp, perched by Bright Angel Point. Accommodated there by the Thomas McKee family, who ran the camp during the summer seasons, Hedin spent time soaking in the ambiance and lore of the Kaibab. Then he went on his final, grand expedition to Cape Royal.

All the while — everywhere — Hedin sketched in pencil and painted with watercolors, products of which he included in his *Grand Canyon*. His art work — particularly the jarring colors of his watercolor scenes — need time to grow into. He purposely used his own creations to illustrate the book, turning down free photographs offered by the Santa Fe because the pictures didn’t offer the same sense—he said they lacked soul. In fact, when one compares his narrations of colors in the scenes he wondered over, they tend to come into the light just that way through his brush.

His syntax and grammar seem awkward, despite verging on the poetic, though that is less attributable to the translation from Swedish than to the fact that Hedin’s final text had been edited by him from observations, descriptions and thoughts included in letters that he had written to his mother. Thus, more than crafting a stringently produced travelogue, he relies on a more relaxed narrative style, one which is almost a train of thought, that may also account for the run-on paragraphs that sometimes hop around their focus. His writing style also betrays an academic heaviness, which he seems to try to smooth out for the benefit of his mother. Much of the translation, though, is intact, preserving the sense of the original even if it seems graceless. In fairness, some of his remarks are reflective, even endearing; these are shining points in his letters. At the least, we readers of English now know about some of Hedin’s activities and his thoughts while at the canyon; we learn about his experiences and interactions with people there; and, in the end, we even may discover a few

new interesting details about what transpired among the tourists who flocked to the canyon in those days.

Still, Hedin’s text is larded with all-too-frequent references to the cardinal directions; and more bothersome are his tediously repetitive recitations of the names of geographical features and their elevations. To these he melds an ample, subtly detailed, color palette. He means, of course, to provide word-pictures of the scenes before him; but here, as with virtually every other person who has written their descriptions of the canyon — though mostly not at such length as a book — their recreation in the mind’s eye of the reader can at best be only poor. He admits as much, too, that “trying to give a concept of the Grand Canyon with words alone is, as I have emphasized several times, completely hopeless.”

As for the geographical nomenclature, Hedin likely presumed that the specially highlighted map published in his book would help sort out the positions of the names that thoroughly salt the text. It does — though the views really can only be understandably labeled in person. He perhaps even thought that in some limited measure his illustrations would help. They do — insofar as they express some of the moods Hedin experienced; but alas, the reader could also have benefited from the photographs that he refused.

Much of the book is like a lecture, but we lack the speaker’s pointer and its accompanying narration that would engage the audience. He must have had a compass with him, too — the explorer in him — as in many places he records the directions of his views by degrees from north. And he insistently shows some need to keep track of the time on his watch, and the air temperature — to the tenth of a degree. The world adventurer, widely published in scientific and geographical circles, probably was so used to this sort of supporting information that he was only carrying forward as usual, even though he was writing to his mother. But he was in fact continuing a forty-year habit of corresponding to his parents from the field. So, in 1923 such rambling technical details about the Grand Canyon landscapes were probably appreciatively absorbed as only a mother could of her cultured child’s indulgences.

Yet despite all this, there are many passages throughout his book that convey delightfully personal experiences and observations. In many cases they are unique in the Grand Canyon literature; and so the book does win its usefulness to this genre.

THE MAIN PURPOSE of this translation has been to make Hedin's work available for the first time in English, a century after its original publication.

The translation was created through the use of Google Translate online. One must agree with those who know, that there is no such thing as a word-for-word translation, that it is an art form responding to context and grammatical and other nuances. Google Translate is simply a "neural machine translation service" that takes on a sentence at a time, a service that which over time "learns" to construct better and more grammatically correct sentence structure and word selections.

But far from this being a simple transfer of results from Google Translate, this volume is the product also of judicious editing, first for sense, then when necessary using retranslations to avoid ridiculous synonymies introduced by the artificial translator. Conventional Swedish–English dictionaries have assisted, as also have other translation resources (for example, the helpful Swedish synonyms website, synonymer.se). Hedin's run-on, repetitive narrative style contributes to the stilted feel of the translation, too, which emphasizes the fact that a more elegant translation by someone who is fluent in both languages would produce a clearer text for readers in English, even though that would likely be at the expense of the mood and focus of his compositions for the woman he called "Mamma."

The text layout of this volume approximates that of Hedin's 1925 edition with regard to the layout of chapter titles, page enumeration, and so on; with the exception that his page size was 6 × 9 inches, totaling 297 pages, and the illustrations were interleaved throughout the text (see "Sven Hedin's Illustrations" *below*). And as with the original edition, Roman pagination begins with 1 on what herein is the facsimile reproduction of Hedin's title-page.

Few attempts have been made in this translation to offer the kinds of editorial annotations that correct, update, or explain information that Hedin presented or about people that he mentions. To do so at length would have destroyed the main purpose of making his 1923 visit to the canyon available to English readers for the first time; it is not meant to be a studious critique of his work, best left for another time. This translation is meant to be read with Hedin as he travels through the canyon; another translation can be the one with which we may study Hedin.

At one point, we discover that his hosts at the Grand Canyon apparently never explained the origin of the many Classical names that have been applied to the geographical features of the canyon; the ones that were, as is well known, applied during Clarence E. Dutton's monumental survey that was published in 1882 as *Tertiary History of the Grand Cañon District*. Although Hedin mentions that he was familiar with this work, it was only for the fantastic illustrations drawn by William H. Holmes. Hedin obviously never had had the opportunity to enjoy Dutton's narrative, in English or otherwise. At the canyon, he decries the names of the temples and other features—put there, he says sarcastically, "God knows by what genius." He thinks that they are "a pompous but otherwise arbitrary nomenclature, anything but genuine. One wonders why these names of the gods of the oldest religions have been tossed about each other right here, on American soil. On one and the same massif we find Odin, Thor and Freya in association with Vishnu, Krishna and Rama. The Egyptian divinities are nearest neighbors to China's great religious teachers. In no other part of the world has such a geographical act of baptism been undertaken with so little piety."

This was not the limit of his opinions of Grand Canyon. At one point he had offered comments to a prospective Santa Fe architect, surmising, "The current hotel at El Tovar is about as bad as it gets in terms of the view."

Most of his geographical terminology is not updated in this translation, in order to preserve his usages, although a few editorial comments are made where deemed appropriate. His capitalizations (or lack thereof) are retained, as are also his use of words or phrases within quotation marks, some of which were in English and others as devices of emphasis. His use of the diacritical mark in "Santa Fé" is retained.

Certain terms, unsuitable today, are retained in their translations; for example, Hedin's references to "negroes" and "redskins." The former were met aboard the train and refer of course to the porters who in those days were employed by the railways almost exclusively from among the African–American populace, who, even though they were in responsible positions, still were considered part of a "servant" class. He holds a more appreciative view of American Indian cultures, particularly of the Hopi, whom he pitys for their embracing less spiritual ways of the Americans and for their having to rely on "tips" that condescending tourists would throw to them following dances at prescribed times outside Hopi House.

In his descriptions of the canyon's geology, Hedin rattles off the names of the rock layers as frequently as he does the geographical names—even unfortunately saying at one point, "although I have already mentioned the various formations, I am recapitulating them once again for the sake of better memory." Hedin was of course not a geologist nor apparently was he exposed to much formal geology. His geological discussions are derived from publications of the day, though they ramble and are presented in assorted ways. Most particularly he periodically credits the U.S. Geological Survey's Nelson Horatio Darton, who was consigned by the Fred Harvey company to create a detailed booklet on Grand Canyon's geological history, which was first published in 1917 as *Story of the Grand Canyon of Arizona: a Popular Illustrated Account of Its Rocks and Origin*. It was sold widely through Santa Fe/Fred Harvey outlets. By the time of Hedin's Grand Canyon visit, the booklet was already into its 7th edition. In light of the advances made in the past century towards understanding the canyon's stratigraphic and physiological histories both, one may now easily excuse many of Hedin's (and Darton's) geological misnomers.

SVEN HEDIN'S ILLUSTRATIONS

Hedin illustrated his *Grand Canyon* with pencil sketches and watercolors that he had made on the scene in 1923. All of the illustrations are reproduced with this translation.

Hedin was the first to admit, in his Introduction, "It is therefore presumptuous of me to illustrate my portrayal with my own sketches drawn and

partly colored on the spot. But these pictures, which lack all artistic value, will, as I hope, may in someone facilitate the understanding of the text. I had permission to reproduce as many as I wanted of the numerous photographs handed to me at El Tovar. But the sketches have, in my opinion, an advantage over the photographic plates in that they reproduce personal impressions and an individual perception and thus possess a soul.”

Hedin’s publisher placed illustrations in interleaved fashion throughout the text, although only some of them pertained to the text of the chapters in which they appeared. In this translation, because the text is reset, no attempt has been made to place the illustrations in the same relative positions. They are, however, kept in the same order but they are shown in groups at the ends of the chapters in which they originally appeared — again, with the caveat that not every illustration in a chapter pertains to the topic of that chapter.

The original legends of Hedin’s illustrations appear in the images reproduced here. Below each of them is a translation, and a notation as to which page they appear in the 1925 volume. ▪ ▪ ▪

View Finders

GRAND CANYON PHOTOGRAPHERS & CINEMATOGRAPHERS

Volume 1: Introduction and Annotated Photobibliography and Filmography

Earle E. Spamer

CHAPTER 8

VIEW FINDERS

GRAND CANYON PHOTOGRAPHERS AND CINEMATOGRAPHERS

Volume 1: Introduction and Annotated Photobibliography and Filmography (2023)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2023/10/View_Finders_Vol-1.pdf (23 MB, 648 pp.)

GRAND CANYON'S VIEW FINDERS: AN INTRODUCTION

"How did the thing work, anyway?"

THE GRAND CANYON is a huge subject, geographically and conceptually. Its geological definitions differ, too, with the canyon's rim calling the shots dramatically, while the Colorado River engages the canyon's strata in Marble Canyon before the physiographic rim ever gets around to defining "the edge." So it is reasonable that the historical Grand Canyon likewise embraces the chasm and its river in different fashion. Riding or walking to the edge is an abrupt and startling experience. Riding the river, one finds that it burrows into the canyon's geologic column at Lees Ferry, at the start of Marble Canyon and long before reaching the Grand; and in fact, when the river does reach the great canyon, it is effectively at basement level. For this reason, this volume has to see "the Grand Canyon" in its more widely dispersed geographical guise, adding Marble Canyon and the landscapes that brush upon the brink of the chasm as if everything were one indivisible setting. It is an editorial decision, too; one meant to accommodate the eagerness and accomplishments of enthusiastic scenery scouts who for the past century and a half have scampered and rambled just to grasp the best view or create the newest view—or who gave up to just dazedly document what they saw.

The distinction between a photographer and a cinematographer is clear cut for the most part, and these days they are artists in their own right though their methods and audiences are different. A case in point was conceived in 1918 by Thomas Dreier, who was writing for an audience of ad men, and perhaps not so coincidentally the men he mentions, one lecturer–photographer and one film star, are also represented in the present volume for their work at Grand Canyon.

> Suppose you are interested in getting several millions of our fellow citizens to look at some Grand Canyon scenery in the moving picture houses.
>
> There are two things you can do. You can get Burton Holmes to take pictures of the scenery and give a mighty fine lecture on the subject. He

> will do a high-grade job and a few odd thousand more or less highbrow persons will pay money to attend the show. That is a good way to do the job.
>
> But that is not the way to get the attention of the millions. The way to get the millions to come and look at your scenery (folks who are not at all interested in your scenery to start with) is to put something into the pictures that will capture their attention right off.
>
> Suppose, for instance, you show the same scenery that Burton Holmes or a press agent for a Canyon hotel would use, but put Douglas Fairbanks, a beautiful heroine, a villain, a few horses and mix them all up together in a gripping heart-interest drama.
>
> People will come to see Fairbanks and they will get the scenery without knowing what is happening to them.[2]

The Grand Canyon's Kolb brothers, Emery and Ellsworth, understood this; but they instead starred themselves. They started out in 1902 as picture-takers on the rim of the canyon, finding scenic views but also finding tourists mounted for trail trips eager for photographs to prove that they were there and how resilient they were in the death-defying act of riding into the canyon's depths. Already well known by then were the dashing Colorado River exploits of John Wesley Powell, who used photographers on his second expedition in 1871–72, and Robert Brewster Stanton, who used a photographer, too, in 1889–90 (and despite being a novice, took over for him when the cameraman was severely injured and had to be carried out of the canyon). The Kolbs figured they could do it better, not only with still pictures, but, for the first time on the river, motion pictures. So in the winter of 1911–12 they rowed down the Green and Colorado Rivers just to take pictures and films, which directed them into a new life as lecturers and authors. Soon afterward, Emery went on the road, criss-crossing the country narrating the brothers' film to audiences in cities and small towns alike. And by this time too the Grand Canyon's

[2] Thomas Dreier, "Why Do We Publish House Organs?" *Postage* (An Illustrated Monthly Magazine of Effective Direct Advertising), Vol. 6, no. 6 (December 1918), p. 19. The Fairbanks reference is not random, as at that very time the silent-film actor was appearing in the theaters in *A Modern Musketeer*, which was filmed in part at Grand Canyon—"with a heroine, a villain, and a few horses." [For the Burton Holmes and Douglas Fairbanks connections, see the extract from *View Finders* appended to this chapter.]

reputation preceded itself; pretty much anything about it interested diverse audiences, whether in print or in theater seats.

Appended to this Introduction is an illustrated section, "Some Views, Found," a sampler meant for casual and informative perusal but is of pertinence to the photographers and cinematographers that star in Grand Canyon's illustrative history. In no sense is it a comprehensive introduction to Grand Canyon photographic illustration but it may entice others who may have the time to branch out. The millions are there.

I. The Photographers

THE GRAND CANYON has been the subject of photography ever since John Wesley Powell's second Colorado River expedition of 1871–72, which had employed at various times on the Green and Grand Rivers three photographers, E. O. Beaman, James Fennemore, and John K. Hillers. The expedition led by George M. Wheeler up the lower Colorado and into the Grand Canyon from the west in 1871 also employed photographers, William H. Bell and Thomas H. O'Sullivan. None of these picture-makers saw the entire Grand Canyon, end to end. In fact, Beaman and Fennemore both had left the Powell expedition in Utah, at different times, even before reaching the Grand Canyon, although Beaman independently went on to photograph the Kanab Creek area. The images created by Hillers were made during the Powell river trip of 1872 between the Paria River and Kanab Creek, and in the country north of the canyon during land-based surveys.[3] Bell, attached first to Wheeler's peculiar boat-drag up the river through the western part of the canyon to Diamond Creek, created photos of that trip and imaged for Wheeler's work some land-

[3] The expedition of 1871-72, which was intended to repeat Powell's 1869 trip to allow better measurements and documentation, was interrupted at the Paria River with a winter layover spent in Kanab, Utah, then continued in 1872 but was foreshortened at Kanab Creek in the depths of the Grand Canyon when Powell suddenly decided to end it. He supposedly decided that they had accomplished what they needed to do in light of the 1869 expedition having gone through the entire canyon. Historians have mulled over the decision, that there may have been some apprehension over the remaining rapids and possible Indian unrest. The second expedition landed in Kanab again to begin a program of precise, though small-scale, mapping of the region in southern Utah and northern Arizona. See a contemporary photo album of Hillers' survey work (without descriptions) in the Yale University Library, digitized online at https://collections.library.yale.edu/catalog/10001639 (last accessed April 13, 2025).

based views in the Kanab Creek region and easternmost Grand Canyon near the Paria River, where likewise O'Sullivan captured views on the west and east. Of all the photos by these men, none were specially artistic compositions; though usually well composed, they were documentary views. Yet it was these men who were first to see these landscapes through the lens.

The employment of photographers was a bit unusual, too, in that early exploratory expeditions in the American West tended to bring along illustrators (if anyone to record the scenes). The celebrated army exploration of the lower Colorado River and (by land) western Grand Canyon under Joseph C. Ives, in 1858, started on the Colorado River delta in Mexico at the end of 1857. The photographic tent was wrecked in a storm there, having apparently been used for just one photo, now lost, which had been translated into a lithograph for Ives' final report in 1861.[4] Nevertheless, the expedition was instead amply and marvelously illustrated by two artists.[5] Powell's first trip down the Colorado, in 1869 produced neither photographs nor artwork, and in the end he never used the photographs of the second expedition to illustrate his reports and articles. He depended instead upon woodcuts and lithographs—some of which were delineated by artists and engravers from the photographic views. It fell upon Clarence Edward Dutton of the Powell land survey to publish heliotype reproductions of photographs in his later, magnificent report on the Grand Canyon District (1882),[6] though these only supplemented the larger number of lithographs.

It would have been easier just to say that the first Grand Canyon photographer was so-and-so. But the canyon is huge—or more accurately, geographically long, by hundreds of miles. It attracted several expeditions over

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[4] Joseph C. Ives, *Report upon the Colorado River of the West, explored in 1857 and 1858 . . . .* Washington, D.C.: U.S. Government Printing Office, 5 separately paginated parts and four appendices in 1 volume. (Volume: *U.S. 30th Congress, 1st Session, House Document 90.* Also as *Senate Document* [no number].) The plate here mentioned is "Robinson's Landing, Mouth of Colorado River", General Report Plate 1.

[5] See resources in the complementary volume to the present work, Earle E. Spamer, *Art of the Grand Canyon : an introduction and annotated bibliography* (Raven's Perch Media, Philadelphia, 2023; PDF via https://ravensperch.org).

[6] Clarence Edward Dutton, "Tertiary History of the Grand Cañon District; with Atlas," *U.S. Geological Survey Monograph 2* (1882).

the years, with photographers arriving on the later forays. Given the size of the canyon and the attendant logistical problems of its exploration, it comes as no surprise, really, that the photographers came from different directions, even if at about the same time, and that none of them traveled the length of the canyon. Temporally, by the calendar, there is a precise "first," but that was only by happenstance; Hillers, Bell, and O'Sullivan all were first view finders in the Grand Canyon field.

Two decades after the Powell and Wheeler forays, there was the remarkable effort turned out by Robert Brewster Stanton during his 1889–90 Colorado River expedition that probed the possibilities for building the Denver, Colorado Cañon & Pacific Railroad (which never was built). The story is well known. It is as well known as Powell's expeditions perhaps because, like Powell, three men died (including the president of the railroad company). But Stanton's companions were claimed by the river, not because they had quit the river and met their fates a long way away as befell Powell's companions. The Stanton disasters took place in Marble Canyon, on two different days in 1889, which ended the expedition for the season. Stanton regrouped, returning to tackle the remainder of the project again in 1890, and straight away one man fell and broke his leg. That was a dicey story itself, carrying the incapacitated man out of the canyon—while he was unconscious. Fortunately, once on the rim they were not terribly far from the second-season's embarkation point at Lees Ferry. *Un*fortunately, the man, Franklin A. Nims, happened to be the expedition's photographer (so of course he, too, never saw the Grand Canyon). In those days photography was more than pointing and clicking. Stanton, acknowledging that he was not in any sense a photographer, took up the responsibility. He confessed a few years later: "I had never adjusted a camera, had never seen the inside of a roll-holder. How did the thing work, anyway?"[7] And he wound up being the first photographer to travel the length of the canyon.

The public eagerly followed newspaper and magazine reports of the Stanton survey's progress as it made its way down the river through the

[7] Robert Brewster Stanton, "Engineering with a camera in the cañons of the Colorado," *The Cosmopolitan*, Vol. 15, no. 3 (July 1893), pp. 291-303.

canyons. On infrequent occasions Stanton managed to send out letters to correspondents and the press. It had been a while since there was this kind of public engagement with an expedition in the field; not since Powell's expeditions three decades earlier. This time, though, it was a matter of commercialism, not exploration. The scenery was beyond compare—of that there was no doubt —which could be interesting to a paying, traveling public. But over all was the matter of *profits*; sizeable profits from tons of shippable, saleable stuff that would roll through the canyons hauled by locomotives. So the survey, if photographed in detail, would prove how likely this could be.[8] Accounting figures could be contrived and juggled for savvy or unwary investors both, but the scenery could not lie to those who could make it all possible. *Could* a railway be built to the west coast by way of the canyons? Stanton said yes—although he said yes with bluster, his hat held out for coins.

And the photographs? As the expedition proceeded through the Grand Canyon, Stanton had no way of knowing of his success or failure. Only after having met up with a trustworthy prospector in eastern Grand Canyon had Stanton the opportunity to send some films out to be processed. Three months later, by telegraph at Peach Springs, he received word, "Negatives all right." In the end, almost all of the sixteen hundred of them were good. Astonishing.

The Stanton views of the river through Grand Canyon are not only the valuable record of a long expedition (were that Powell had had such a detailed record!), but they have proven to be vital for studies of changes (significant and nil) that had occurred over an ensuing century. Geologists, hydrologists, and ecologists all have gleaned much from making these comparisons—thanks to Stanton's luck. How much of it was dumb luck, compared to the luck that comes from learning as he went, perhaps can never be known, but his accounts tell us much about the latter.

[8] The photographs have been instrumental in a major rephotography project, which identified the exact positions of the photographs, reproducing the views, which have been used by modern environmentalists and hydrographers in studying the changes along the Colorado River (if any) during a century. See Robert H. Webb, *Grand Canyon, a century of change : rephotography of the 1889-1890 Stanton Expedition* (University of Arizona Press, 1996). Various other projects of rephotography in the Grand Canyon have been accomplished as well [cited in *View Finders*].

Stanton's work was documentary, not artistic or otherwise expressive, although in one remarkable instance, while they were camped at Crystal Creek, Stanton and two men attempted a climb with their camera to the North Rim, winding up instead atop the Tower of Ra and there breaking the camera's ground glass (but he had brought six of them on the expedition), which was found in 1979.[9]

Unlike the work of artists at that time, the main body of the canyon was not yet a photographic subject unto itself. Whereas Thomas Moran is regaled as the premier Grand Canyon expressionist artist in paint, having first arrived there in 1873 on the North Rim with the Powell survey, the photographers of comparable significance, Hillers, Bell, and O'Sullivan, were responsible for Grand Canyon's first portraiture through the less impressionistic lens of documentary photography. Still, they crafted their images—including stereoviews—with cumbersome equipment and portable darkrooms. They produced some of the great pictures of the 19th century as well as a cadre of mediocre compositions that are largely overlooked today (but for the record see a few of them herein because they are less often seen). These men were (certainly not to diminish their work) just "view finders," composing their shots, sometimes with much (even extraordinary) difficulty in getting into the position they wanted (like Stanton atop the Tower of Ra). But otherwise they were not "expressing" their interpretations of the subject. On their negatives a man is a man, a river a river, and a canyon a canyon.

Wondrously to their credit, even Thomas Moran used some of the pioneering Grand Canyon photos to assist his delineation of various scenes for Powell's publications, which were transformed into woodcuts and lithographs [examples shown in *View Finders*]. But the photographers did not come into instant wealth as had Moran, who received $20,000 in the 1870s for two gigantic canvases of grand canyons (one on the Yellowstone River, the other our celebrated Grand of the Colorado River). Legions have since then tried to present Arizona's canyon on film, many with resounding critical success,

[9] See Robert C. Euler, "The Climb to the Tower of Ra," *in* Robert H. Webb, *Grand Canyon, a century of change : rephotography of the 1889-1890 Stanton Expedition* (University of Arizona Press, 1996), pp. 24-25.

others not so much, and many more whose work is seen simply in passing. Some are professionals, making a living at it and having their work constantly reused; most others are the occasional snapshot takers who happen to contribute a few pieces of their work to magazines and newsletters. And so it is the object of the present photobibliography to document as much as possible from this widely diverse published body of work while not overlooking the "unfamous" ones. This certifies the breadth of interest there is in the Grand Canyon and authenticates for administrators of federal and other super-intended lands some ways in which the landscapes under their management or cultural guardianship are "used."

For Grand Canyon painters, the 20th century had begun as vigorously as the 19th had ended, partly due to the longevity of the master, Thomas Moran. But at this time photographic picture books had begun displacing the less easily accessed paper and canvas portrayals of the canyon meant for museums, galleries, and private homes. The traveling public—"parlor travelers" too—were consumers of newly produced text and photo books turned out in the tens of thousands (not to mention the blizzard of postcards) by the Santa Fe Railway, luring readers with the ease of rail access right to its South Rim accommodations. Later, the Union Pacific Railroad promoted its lone North Rim property with picture books and a few postcards as well, though that journey for visitors was a long, scenic but tedious bus trip from the nearest rail station in Utah. The traveling public also became principal photographers themselves, with which to regale audiences in their homes, schools, churches, and meeting halls.

At the South Rim, competing photo books were produced by the pioneer tourist businesses that bookended the Santa Fe's properties—Verkamp's and Kolb Bros. They published these mementos to complement curio sales (at Verkamp's) and to augment the monopoly (by the Kolbs) on trail-ride line-up photos. Then there was *Through the Grand Canyon from Wyoming to Mexico* (Macmillan, New York, 1914), the long-in-print book by Ellsworth Kolb that Emery sold and signed by the thousands throughout his long life, right to visitors at the Kolb Studio. The adventures were illustrated in the book with many views of wild scenery and the derring-do of the brothers' expedition

down the Green and Colorado Rivers in 1911–12. The Kolbs were not the first to create motion pictures at the canyon—this was accomplished by other entrepreneurs—but they *were* the first movie-makers on the river, working under amazingly difficult conditions that overshadowed the comparatively sedate efforts of the land-based shutterbugs.

Unlike its efforts with a group of celebrity artists (including Moran) who gathered themselves as the Society of Men Who Paint the Far West, the Santa Fe never repeated for celebrated photographers the dedicated special trip to the canyon in a private car. The commissioned picture books under the Santa Fe's imprints sufficed, and they overwhelmed the more meager, meekly advertised, products of Verkamp's and the Kolbs. (Despite already being at the canyon, where the attending buying public was on the scene, the businessmen did not have the sales punch of outlets all along the railways that reached even those who were not going to the canyon.) With time, too, more photo books were turned out by well-respected photographers, particularly through the middle of the 20th century; and the close of the century and the 21st has since seen remarkable photographic publications by many artists.

In the midst of the early uptick in photographic promotions also were the efforts of internationally well-known lecturers, who traveled the world with cameras and then again to stand on theater stages to delight large audiences with their travels, relying on their magic-lantern backdrops. It was a time that still fed off of the 19th-century lecturing phenomenon that routinely attracted hundreds for each gathering—entertainment before the days of "movies" and of a different sort than the artificiality of "going to the theatre." Stereoviews for home and school use were keenly popular, too, the producers of which included the prominent international firm of Underwood & Underwood, which among its numerous offerings was a specially marketed boxed set for the Grand Canyon (though they did pad it out with a few leading cards showing views that might be seen by some travelers while en route overland to the canyon). And finally, ever since the latest part of the 19th century, there were the picture-postcard producers, whose work was voluminous and varied (see hundreds of samples in Volume 2 of *View Finders*).

It was not until the middle of the 20th century that photographers began to be prominent on the canyon's rims and in its depths. Those that muscled their ways into magazines are notable; a few of them also established their own studios with printed products, canvassing the whole American Southwest, like those from Carlos Elmer, Ray Manley, and Bob Petley. Then there were expeditioneers like Barry Goldwater on the Colorado River, who self-published a book and ran a film that finally, though briefly, detracted from the Kolb Brothers' monopoly on river-running graphics. Home-grown cinematographers, too, horned in on the river filming–lecturing circuit, as noted below.

With the 20th century's photographers have come ambitious styles of expression. Yet to date there has been no comprehensive historiographical accounting, unlike the rich field of Grand Canyon's painters and similar artists on canvas and in various media. *View Finders* will hopefully provide grist to the mill that needs to work away at the photographers mentioned herein. Many of these view finders of course deserve their own in-depth studies, which surely will come. Bear in mind: there are lots more, too, who have not been found for the photobibliography of this volume. It is a rich field. And today, the Grand Canyon Conservancy sponsors the Grand Canyon National Park's program of Artists In Residence, which embraces more forms of creativity than just those that are pictorial. Their engaging interactions with the visiting public have been unique and inspiring.

II. The Cinematographers

AS ALREADY alluded to, the photographer brothers Emery and Ellsworth Kolb were at the forefront of the documentary motion pictures on the Colorado River, with their 1911-12 run down the Green and Colorado Rivers. But they were not the first to bring the crank cameras to the canyon.

The internationally well known lecturer Burton Holmes had been to the Grand Canyon by 1899.[10] He was successfully riding on the coattails of the 19th

[10] "The Launch of a Popular Lecturer," *in* "The Stage" [section], *Munsey's Magazine*, Vol. 20, no. 5 (February 1899), pp. 810, 812.

century's lecture phenomenon, where people by the hundreds, if not thousands, would converge on theaters to be entertained by speakers whose illustrative materials ran the gamut from poster drawings to lantern slides, and later to motion-picture films. In 1908, Holmes published Volume 6 of the *Burton Holmes Travelogues*, which included several stills from a film taken (in 1905?) of the well-known wind-jammer John Hance telling a fish story beside one of the rapids on the Colorado River [shown in *View Finders*].[11] By 1916 Holmes had produced at least one silent travelogue film, *The Grand Canyon of Arizona: A Burton Holmes Travelogue*, which in less than four minutes depicted tourists arriving on the train, some scenery, and a mounted ride to the Colorado River. In 1921 he produced another film, *Across the Grand Canyon*, which featured the newly built suspension bridge over the river.

All of the early filming productions were, of course, silent. By 1910 or earlier the George Kleine firm of Chicago and New York was offering a short educational film, its title not recorded but described as "Stage Leaving Hoppi (*sic*) House and Panorama of Grand Canyon." In 1912, the Kinemacolor Company of America filmed what could be the first dramatic film at the canyon, *The Explorers*, also one of the first movies to be filmed in color under natural lighting; but, supposedly released in 1913, regretfully nothing more has thus far been found about this title [shown in *View Finders*]. The firm of Thomas A. Edison, Inc., of Orange, New Jersey, released in mid-1913 a short scenic film about the Grand Canyon. (Contrary to some sources there is no Grand Canyon film supposedly by the inventor himself, which statements seem to confuse this film by the Edison firm.) In 1914, *The Bargain*, a drama from the New York Motion Picture Corporation, included Grand Canyon area locations. In 1915, an educational short subject on the Grand Canyon was worked into the animated " 'Dreamy Dud' in King Koo Koo's Kingdom," from Essanay. Then in 1917 the silent-film actor, dashing Douglas Fairbanks, lept about at the canyon while filming the romance–comedy–drama, *A Modern Musketeer* (Artcraft Pictures, 1917). Chased by the hounds of media sensationalism, Fairbanks' heart-

[11] The film seems to no longer exist; the Burton Holmes film repository does not have a record of it (*fide* Shane Murphy, September 25, 2023; and see Murphy, *John Hance : the life, lies, and legend of Grand Canyon's greatest storyteller* [University of Utah Press, 2020]).

stopping, perhaps coo-coo, athletic stunts photographed on the very rim of the canyon [shown in *View Finders*] not only assured more of his public's adoration but helped propel audiences into the theaters to see this film. Some of the death-defying stunts were not even for the film but for publicity—which he got.

By the mid-20th century, independent adventurers filmed their adventures on the Colorado River—for example, Clyde Eddy (1927), Barry Goldwater (1940), Charles Eggert (1956), Otis "Dock" Marston (1950s [shown in *View Finders*])—though these were not productions for the largest theaters nationwide. Eventually, television came to the canyon, too. By and large, most of all of these creations were travelogues and day-in-the-life-of documentaries; and while there always had been interest in the Grand Canyon, by now it was no longer a novelty.

A few dramatic and comedic films from Hollywood behemoths that used the Grand Canyon backdrop came and went in the latter half of the 20th century. But a couple of major efforts, filmed in the canyon and on the Colorado River both, brought them roaring anew to the public's attention, even if only temporarily. The Disney firm was the first to successfully produce a full-length film on the Colorado through the canyon, *Ten Who Dared*, a docudrama about the John Wesley Powell expeditions. IMAX lit up the grandest screens with *Grand Canyon—The Hidden Secrets*, a wide- (and tall-) screen semi-historical review of the canyon's human and natural histories, immersing its viewers with splashy scenes in the Colorado's rapids, too. And documentarians with another IMAX production, MacGillivray Freeman's *Grand Canyon Adventure: River at Risk*, pledged to alert the world to a generation of environmental ne'er-do-wells who threatened to diminish the grand experiences of centuries.

The filmography presented in this volume is meant to be a basic directory to many productions, one which can be used as a foundation for a more expansive survey of canyon and river films. At the least, it is something not available before within the scope of Grand Canyon and Colorado River history.

A Note About Postcards

POSTCARDS ARE an obvious genre of "photographs," but a systematic accounting of them is avoided simply because there are thousands produced by numerous commercial and specialty publishers, as well as small-run knock-offs by businesses and entrepreneurs. Even the very large collections held by academic institutions each is quite different in content. Further, the newer cards are still under copyright protection, thus any study that would illustrate a large and comprehensive set may be a logistically outrageous prospect, perhaps best left for a time when all of them are in the public domain. In the meantime, see Volume 2 of *View Finders: Annotated Collection of Selected Postcards of the Early Tourist Era to the Mid-20th Century*. It displays and compares a selection of cards that are in the public domain, from the turn to the 20th century to mid-century. A section in Volume 2 [of *View Finders*] also transcribes messages written by the senders of those cards. Together they offer a historical, artistic, and cultural survey of Grand Canyon visits. No such anthology of Grand Canyon postcards has hitherto been available.

The following pages reproduce a selection from pages 36–44 of *View Finders* that illustrates the Burton Holmes and Douglas Fairbanks connections to the Grand Canyon, mentioned in the Introducton, and an additional film apparently lost.

The original figure numbers are retained.

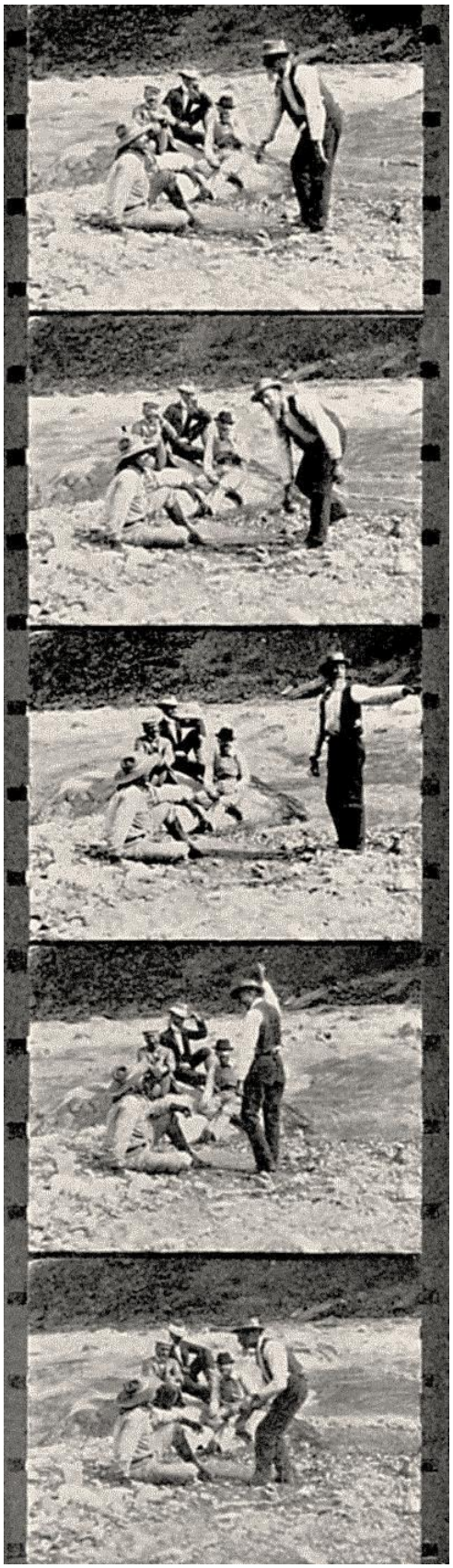


Figure 19. **"Captain John Hance's Fish-Story."**

The Grand Canyon's legendary story-teller was filmed at the side of the Colorado River for Burton Holmes's internationally popular illustrated lectures. This series of stills was published by Holmes in 1908.

Burton Holmes Travelogues: with Illustrations from Photographs by the Author. Volume Six (McClure Co., New York, 1908), p. 171.

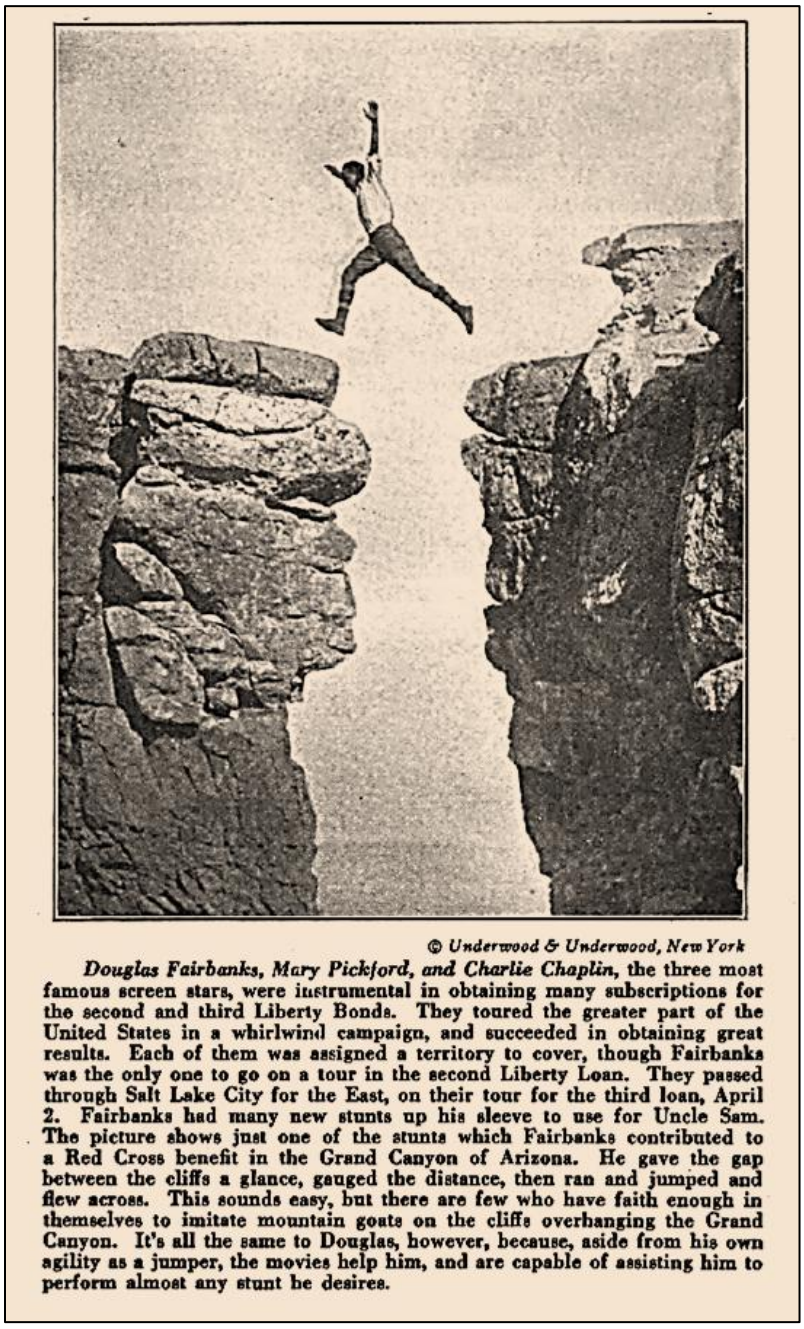
The film seems to no longer exist; the Burton Holmes film repository does not have a record of it (*fide* Shane Murphy, September 25, 2023, author of *John Hance : the life, lies, and legend of Grand Canyon's greatest storyteller* [University of Utah Press, 2020]).

"MOVIES" MADE ON A MOUNTAIN TOP.
This scene was posed at the Grand Canyon of Arizona in a play called "The Explorers." This was so as to get natural scenery as a background. Mrs. Griffith, the girl, is the author of this article. The natural colors of the mountain show in the film.

Figure 20. **In 1912 the Kinemacolor Company filmed scenes for a silent movie, *The Explorers*.**

Although this film is known by title, and by this example from *Leslie's* weekly magazine, little or no information is had about it. The Kinemacolor process was the first to film movies in color under natural lighting, employing different filters during both filming and projection. The author of the article in which this photo appeared, L. A. Griffith—"Mrs. Griffith" as noted in the photo legend—was Linda Arvidson Griffith, wife of silent-film mogul D. W. (David Wark) Griffith who took over the short-lived Kinemacolor studio. Mrs. Griffith starred in many of her husband's pictures. The title, "The Explorers," has not been found in D. W. Griffith's filmography.

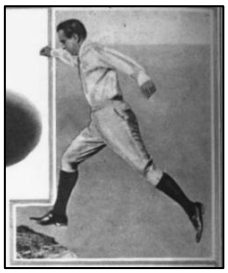
L. A. Griffith, "The Wonderful Moving Pictures in Color,"
Leslie's, Vol. 115, no. 2290 (December 26, 1912), pp. 672, 676.



© Underwood & Underwood, New York

Douglas Fairbanks, Mary Pickford, and Charlie Chaplin, **the three most famous screen stars, were instrumental in obtaining many subscriptions for the second and third Liberty Bonds. They toured the greater part of the United States in a whirlwind campaign, and succeeded in obtaining great results. Each of them was assigned a territory to cover, though Fairbanks was the only one to go on a tour in the second Liberty Loan. They passed through Salt Lake City for the East, on their tour for the third loan, April 2. Fairbanks had many new stunts up his sleeve to use for Uncle Sam. The picture shows just one of the stunts which Fairbanks contributed to a Red Cross benefit in the Grand Canyon of Arizona. He gave the gap between the cliffs a glance, gauged the distance, then ran and jumped and flew across. This sounds easy, but there are few who have faith enough in themselves to imitate mountain goats on the cliffs overhanging the Grand Canyon. It's all the same to Douglas, however, because, aside from his own agility as a jumper, the movies help him, and are capable of assisting him to perform almost any stunt he desires.**

Regarding this stunt, see the article by Douglas Fairbanks, "If I Were Bringing Up Your Children: A Straight Talk About Health and Courage and a Lot of Other Good Things For the Coming Generation," *Woman's Home Companion*, Vol. 46, no. 7 (July 1919), pp. 24, 52, 88. There Fairbanks wrote about "My Most Dangerous Stunt" (p. 24), and the photo page (p. 52, "The One and Only 'Doug' Himself"), includes there another, cropped picture *(inset below)*, apparently from another angle if it is not an artistic rendering, that shows Fairbanks seeming to barely make it. The photo's legend explains, **"The most dangerous stunt he ever did—jumping the Grand Canyon. He says of this feat: 'Never again!'"**]



One might imagine that this one-take scene was not used in *A Modern Musketeer* because, perhaps, the landing was not so perfect. Fairbanks himself had mentioned, **"I was disappointed in the Grand Canyon—I couldn't jump it."** ("Douglas Fairbanks' Own Page," *Photoplay*, Vol. 13, no. 3 [February 1918], p. 40.)

Figure 21. **"Picture showing Douglas Fairbanks leaping a gap, Grand Canyon."** *(See also Figure 22.)*

The public loved dashing Douglas Fairbanks when the athletic actor went to the Grand Canyon in 1917 to begin filming *A Modern Musketeer*. He performed daring stunts while there. Although this picture is said to be a promotional shot, which was not used in the film, some stunts did appear *(see Figure 24)*.

Improvement Era, Vol. 21, no. 7 (May 1918), p. 622
(the photo legend is from the May issue's contents page)

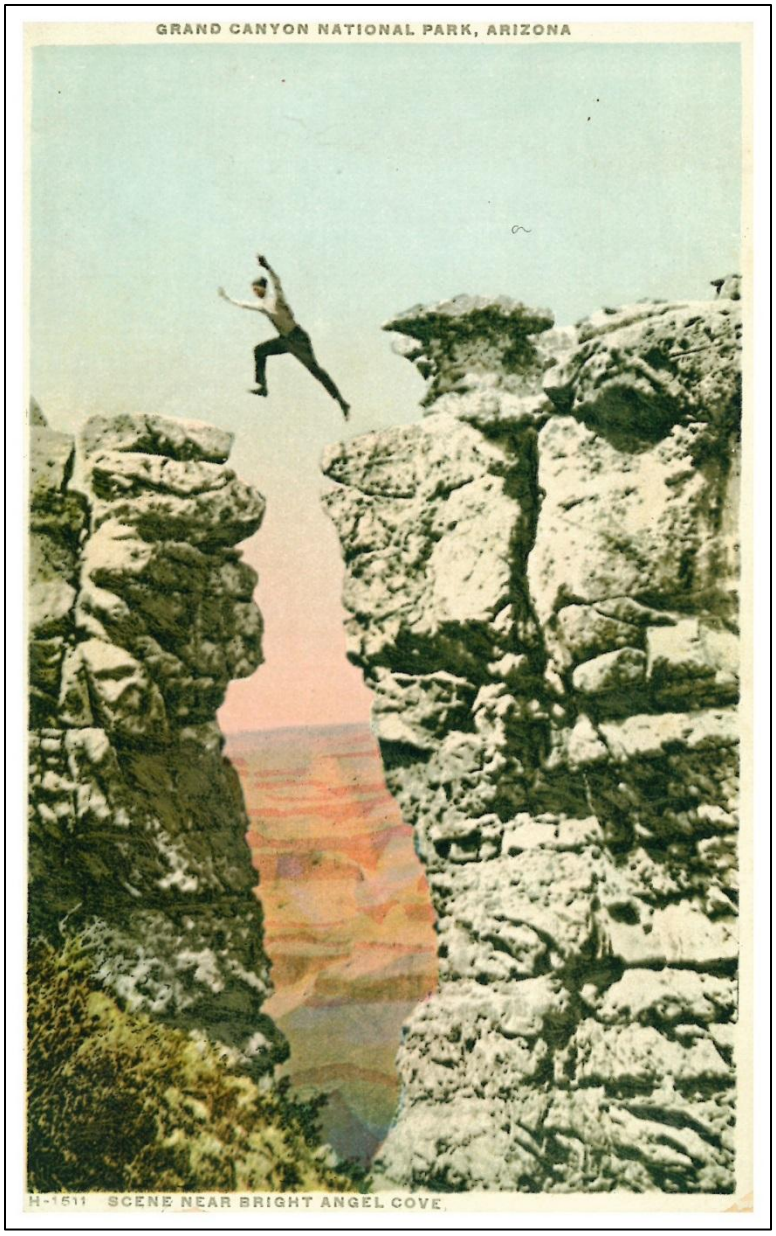


Figure 22. **"Scene Near Bright Angel Cove."**

This Fred Harvey company postcard (not dated), produced by the Detroit Publishing Co., amazingly makes no reference to Douglas Fairbanks or his jump, despite this being nearly the same shot as that in Figure 21 (nor is a copyright acknowledged as is shown there). The legend on the verso of this card is principally a quote about the Grand Canyon from John Wesley Powell. Given the slight variance of Fairbanks' pose and position with respect to the rocks between this view and that in Figure 21, both views seem to be cropped stills from an unused film segment.

(Author's collection)

Figure 23. **"Leap For Life, Grand Canyon, Ariz."**

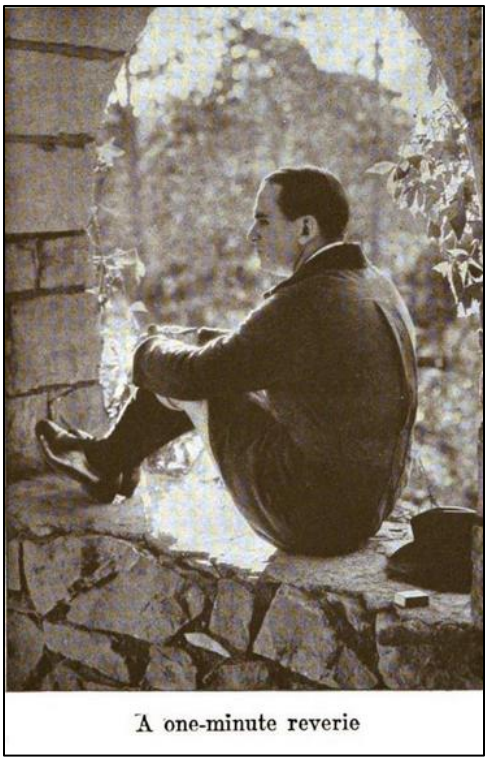
The Fairbanks stunt was recreated in this chromolithographically colored Curt Teich "C.T. Art-Colortone" linen-style postcard, undated, with the credit, "photo courtesy Frank Winess." The postcard's verso legend reads: "This spectacular leap was performed by a Park Ranger at a point known as Douglas Fairbanks Rock about five minutes walk east of El Tovar. The jump is 12 ft. from rock to rock as indicated, with a 2,000 ft. drop below, tho [*sic*] the Colorado River flows a mile below the Canyon's Rim." (Postcard distributed by Lollegard Specialty Co., Tucson and Phoenix.)

(Author's collection)

Figure 24. **Douglas Fairbanks at work on the edge of the Grand Canyon.**

Stills captured from *A Modern Musketeer* at about 40:13 and 40:18, respectively. The stunts are genuine and were performed by Fairbanks himself.

(Stills in Figures 24, 25 and 26 from the public domain film posted on YouTube, https://www.youtube.com/watch?v=vY5XFK67qH0, accessed August 20, 2023)


A one-minute reverie

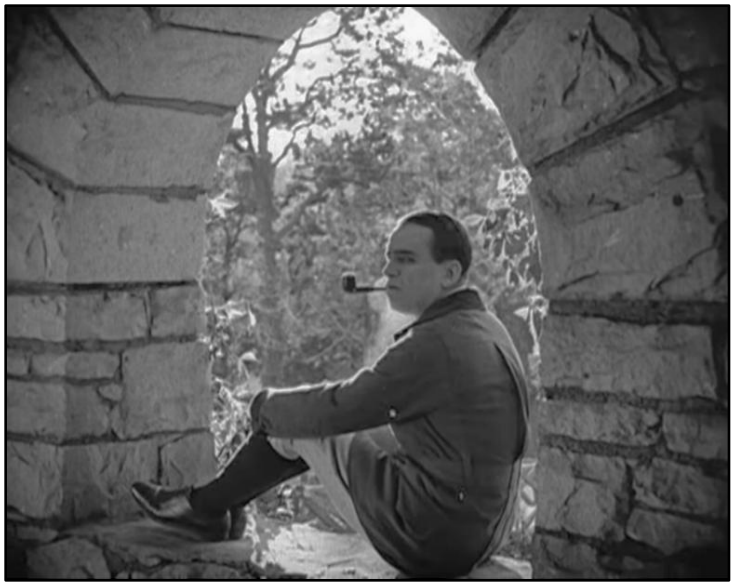


Figure 25.

(left) **"A one-minute reverie."** Douglas Fairbanks, in a rare moment at ease. While the legend does not indicate where this photo was taken, it is here identified from the masonry as the portal on the south side of the front porch of El Tovar Hotel, Grand Canyon.

(Photo from Douglas Fairbanks, *Making Life Worth While* [Britton Publishing Co., New York, 1918], facing p. 100; apparently an outtake from the film.)

(right) A still from *A Modern Musketeer* at about 42:48.

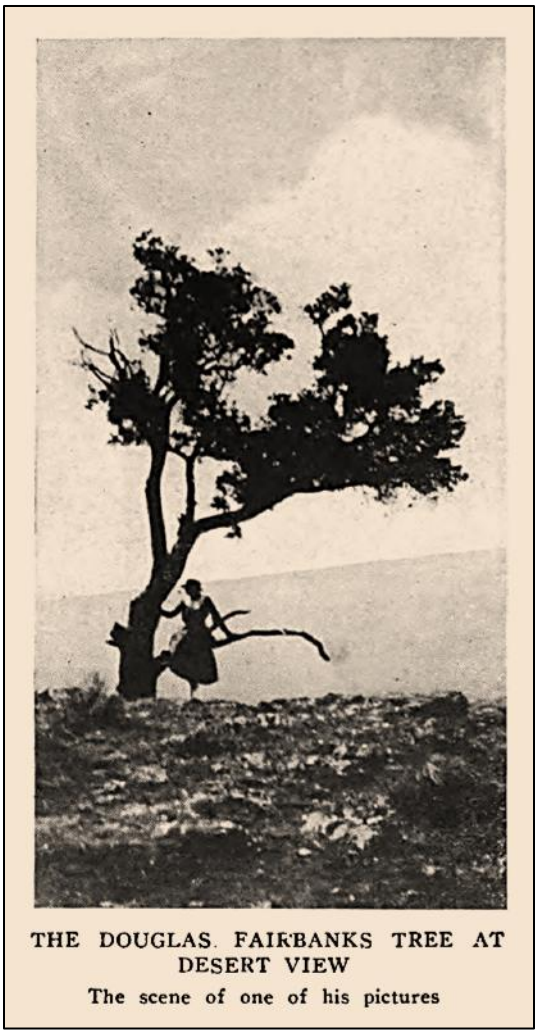


***Figure 26. Trees of* "A Modern Musketeer."**

(left) **"The Douglas Fairbanks Tree at Desert View. The scene of one of his pictures."**

Robert Sterling Yard, "The New Grand Canyon National Park. An Analysis of Its Scenic Features with Suggestions For Its Better Comprehension and Enjoyment: A Report." *National Parks Association, Publication 1* (1919), p. 8.

Neither the tree nor the silent-film actor Fairbanks are mentioned in Yard's text. In the context of the day, Fairbanks was a household name, and this particular illustration, as part of a promotional booklet about the new national park, would have been informative and enticing by itself. He had been at Grand Canyon two years earlier to film parts of the popular film, *A Modern Musketeer*, which appeared in theaters across the country.

(continued on next page)

(below) An undated Fred Harvey postcard, "Desert View Looking North," also used this tree to frame the view, without mention of Fairbanks or the movie.

(Author's collection)

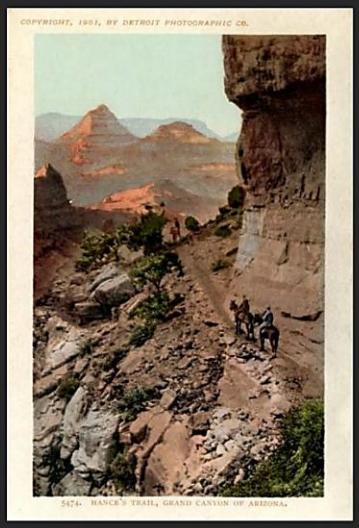
(Figure 26, continued)

In the film there are two trees at different rimside locations that in the context of the story line are implied to be the same place—first just before the actors descend over the edge *(left)* at about 50:07 and then returning to the rim *(right)* at about 63:34. The tree in the still on the right is in fact Robert Sterling Yard's "Douglas Fairbanks Tree." Both views are at Desert View. The view at left is northeastward, taking in Cedar Mountain; the view at right is northward, taking in the canyon.

A third tree features decoratively at the end of the film *(below)* at about 67:45, as our hero and heroine are about to ride into the Grand Canyon sunset.

View Finders

GRAND CANYON PHOTOGRAPHERS & CINEMATOGRAPHERS



Volume 2: Annotated Collection of Selected Postcards of the Early Tourist Era to the mid-20th Century

Earle E. Spamer

CHAPTER 9

VIEW FINDERS

GRAND CANYON PHOTOGRAPHERS AND CINEMATOGRAPHERS

Volume 2: Annotated Collection of Selected Postcards of the Early Tourist Era to the Mid-20th Century (2023) [1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2023/10/View_Finders_Vol-2.pdf (55 MB, 370 pp.)

INTRODUCTION TO THIS COLLECTION

VIEW FINDERS is a historical and bibliographical resource that complements a companion volume on the artwork of the Grand Canyon.[2] Volume 1 of *View Finders* comprises an introduction and an annotated photobibliography and filmography of photographs and films. This is Volume 2, which specially focuses on postcards that were produced from the early tourist years at Grand Canyon, about at the turn to the 20th century, through mid-century. Selective as it is, no such anthology of Grand Canyon postcards has hitherto been available.

Illustrated herein are 359 postcards and 14 excerpts from postcard strips and miniature photo sets. The separate Table of Contents for the 219 plates of illustrations delineates the geographic and topical arrangement of these products in this volume. A few postcards show scenes near the Grand Canyon, which locations are included for their historical perspective as well as for their parts in regional history and tourist interest—the Kaibab Plateau, House Rock Valley, and the Navajo Bridge on the east, and the Grand Canyon portion of Lake Mead far to the west.

While postcards are an obvious genre of "photographs" ideally suited for *View Finders*, a systematic accounting of them is avoided simply because there are thousands produced by numerous commercial and specialty publishers, as well as small-run knock-offs by businesses and entrepreneurs. Even the very large collections held by academic institutions each is quite different in content. Further, the newer cards are still under copyright protection, thus any study that would illustrate a large and comprehensive set may be a logistically outrageous prospect, perhaps best left for a time when all of them are in the public domain.

All postcard examples in this volume are deemed to be in the public domain now; any copyright protections they may have had have expired. Although few have dates on them, those that do are copyright dates, which with

[2] Earle E. Spamer, *Art of the Grand Canyon : an introduction and annotated bibliography* (Raven's Perch Media, Philadelphia, 2023; PDF via https://ravensperch.org).

uncertainty pertain to either the photographs or to the cards themselves. In any case, all of these dates are in the earliest part of the 20th century. Some cards, it will be noted, also carry a copyright symbol (©), without year. Many cards can be dated by their style of production that the work of deltiologists understand in some detail; all of the examples herein point to rather old styles. Copyright Law itself assists in ascertaining what cards are in the public domain now. A concise and very informative website has been hosted for years by the Cornell University Library and is frequently updated; it has been referred to for this volume as a guide to establish when certain copyrights have lapsed.[3] Most postcards carry no indications of copyright, so their ages—or rather their potential age ranges—are determined through circumstantial evidence, if at all.

When preparation of this volume was completed in 2023, anything published prior to 1928 was in the public domain; all copyrights had expired. Then, based on the guide to Copyright Law, anything published without a copyright notice between 1928 and 1977 is also in the public domain; many postcards fall into this category. Today, all productions created in the U.S., with or without a copyright statement, automatically have copyright protection for specific terms, according to aspects of the variously updated law. This was not always the case. In earlier times copyright protection required the item's registration to receive it, followed later by an optional renewal period that usually doubled the length of the copyright; these periods had been for 28 years each. Certain other conditions are now also addressed by the law for time periods in the mid-20th century. Now copyright registration is a special means of legally asserting protection; for example, if a lawsuit for infringement may be brought.

A few cards from mid-century may show some sort of copyright notice, whether by the word "copyright" or the © symbol, but without dates they cannot be verified. Firms that went out of business decades ago likewise would not likely have renewed any terms of copyright, and it is uncertain how these protections may have been conveyed after receivership, if at all. These basic

[3] "Copyright Services: Copyright Term and the Public Domain", https://guides.library.cornell.edu/copyright/publicdomain (updated version last accessed April 13, 2025).

guidelines have been applied here. For some of the mid-century postcards noted herein a good faith effort has been made to ascertain that, if they had been copyrighted, they are not under any current copyright protection. Again, it is the dates that determine coverage and expiration. Postcards that had been mailed carry dated postmarks that corroborate when these cards had been acquired, thus if any of them had been under copyright not so discovered for this volume it would have had to be before the date of mailing. Further, photographers are rarely credited and thus the copyrights pertain to the manufactured product. Only in a few instances on the cards shown herein was a copyright noted for the photographer, but these copyrights have lapsed.

The postcards in this volume are from the author's collection, which also includes hundreds of cards that still are under copyrights, so those made after the mid-20th century are overlooked. In any case, this compilation is meant to be an interesting historical perspective of the early years of Grand Canyon travel. It serves also as a documentary effort that confirms the breadth of commercial interest in advertising the canyon and those who provided transportation to it or amenities once there. This volume, though, is not meant to be a historiographical treatment of the subject, but is an admittedly arbitrary and teasingly brief primer on Grand Canyon's deltiology. It takes opportunities to study special differences between cards, some of which reflect variations of production methods. A few highlight cultural and social stigmas, such as the posing of Native Americans with indifferently incorrect explanatory notes, or the case where artistically added women on one hotel lobby photo are all replaced by men in another version. [*See the appended illustrations farther below.*] These all are works of their times.

There has until now been no such compilation for postcards of the Grand Canyon and nearby locales. In no sense is this an all-inclusive study of these regional postcards; it is not—cannot be—an inventory of canyon area postcards. There are many more that the author has seen, too, but has no copy to reproduce; beyond that, there are unquestionably hundreds of which he is unaware.

For each postcard in this volume, its explanatory text (if any, usually on the card's back) is transcribed. The reader may notice that many legends were

copied or re-edited for use on other cards; sometimes they do not even have any reference to the image on the front of the card. In some cases the legends may even confuse the reader into thinking that they do describe the photo. Other legends include quotations from different sources, which although they are not usually credited an attempt has been made herein to identify those sources. Legends can be literarily effusive, and it is occasionally probable that some elemental phrases used in legends have been borrowed, whether it be from a producer's own travel literature or from the writings of a well-known writer. Dates of copyright are given when indicated, although most cards lack dates; and when a card has been mailed the year is noted to help indicate at least when it was available.

All of the cards shown herein are from the time before card design became noticeably glossy and highly graphic, mostly after the 1970s, when cards began to appear with brilliant photos boasting superimposed, eye-catching text designs. The sedate early times, which is the focus of this volume, are well detailed by deltiologists and it is not the purpose here to expound at any length on the styles of reproduction. There are some basic forms—smooth or textured papers (the so-called "linen" cards were devised by Curt Teich & Co. of Chicago, and a few embossed examples are also shown herein), bordered or borderless images, and some cards that are themselves real photographic prints on postcard stock with standard postcard spaces printed on their backs.

Various circumstantial ways are available by which to date postcards. The earliest postcards had no reserved space on the back for messages—only the address was to be written there, so messages were often crammed onto a small unprinted space on the front. In the U.S., so-called "divided back" post-cards are those with two areas, one for the address the other for a message where also an informational legend may appear, separated by a vertical rule or a string of tiny text (usually publisher's information) serving as a dividing line. These divided-back cards were first permitted by the Post Office beginning in March 1907. White borders were introduced as an ink-saving measure during World War I, when also notices of printings in Germany ceased. The "linen" postcards first appeared in 1930. Photochrome or "glossy" cards are an indication of manufacture after World War II. Sometimes, postage rates were

printed in the stamp box, but these rates fluctuated several times between 1¢ and 2¢ until 1952, during which period the price may not be helpful in dating a card; thereafter prices increased by pennies to 6¢ in May 1971, which is the approximate cut-off date for cards in this volume.

Although cards may not be dated, another determination of relative age can be discerned if producers' or distributors' postal addresses printed on the cards include intracity postal zone numbers (for example, "San Francisco 1, Calif."). Such notations reveal that they predate the use of five-digit ZIP Codes, which were introduced into use on 1 July 1963.

A separate section of this volume, "Postcard Messages From This Collection," is devoted to those cards that had been mailed and on which messages had been written by the card's sender. On the plates of illustrations herein, the cards that have had messages transcribed are flagged with a blue bullet (•). The section also records the postmark in full (place and date) and the city and state of the card's destination. These transcriptions may also enlighten the reader for their various social perspectives. Most messages at least provide some brief impression of the writer's Grand Canyon experience. Others used the cards (even though they were sent from Grand Canyon) just as notecards with no mention of the canyon in their message, which to some readers might be informative in itself. Messages are also transcribed from postcards that are not illustrated in this volume, including a few cards still under copyright of recent time, as a means to provide as many examples as possible from this collection. In few instances are the identities of the writers known.

The postcard pictures in this selection are almost all chromolithographically colored, and it will be clearly obvious that many of the cards especially from the 1910s–50s are exaggeratedly colored—even garishly, ghastly, or muddled. Many variants even use the same photo, though differently colored. One writer, on an unmailed postcard, had to record, "This is my idea of a rotten post card! The 'artist' must have gotten color blind."[4] Unrealistic coloring is such a usual observation that it is superfluous to annotate the descriptions herein with notes about this; they will be immediately obvious to the reader.

[4] See no. 0465 in the "messages" section [in *View Finders* Volume 2].

The only notes on coloration are reserved for cards whose colorings are more creative or peculiar than usual, or made by a person seemingly wholly unfamiliar with the canyon and its Colorado River (as in the cases where the river is colored a passive blue, although that may have been a purposeful device to attract purchasers who were from places where their rivers would be traditionally colored blue).

Many of the cards shown herein are from "standard" publishers of the day; most particularly, the enormously productive Detroit Photographic Company (later the Detroit Publishing Company). The original photographs used on postcards were very often taken by widely traveling photographers, some of them commissioned, who were almost never credited. Some of the publishers also produced their cards for different distributors, whose names also appear on the cards. (One noteworthy local distributor was John G. Verkamp, who founded what became the "Verkamp's" family business, an independent curio shop adjacent to the prized Hopi House of the Santa Fe Railway/Fred Harvey juggernaut. Postcards in this collection are noted with his name and with the Verkamp's business name depending on the time when they were made. The Detroit firm also formally joined up with the Fred Harvey company, and their products will be found throughout this volume.) Most often the photos were not supplied by the distributors but licensed from the stocks of the publishers; there may be exceptions, of course, which cannot always be determined.

Volume 2 of *View Finders* takes the opportunity to display and compare a selection of postcards that are in the public domain, as a historical, artistic, and cultural survey. It complements the coverage of photographic portrayals of the Grand Canyon as summarized in Volume 1. So, delight in the history, revelations, and ideas that follow herein. They comprise a documentary record, but peruse them also to consider new projects about Grand Canyon's postcards—and that marvelous panorama always just called "The Canyon."

(Author's collection)

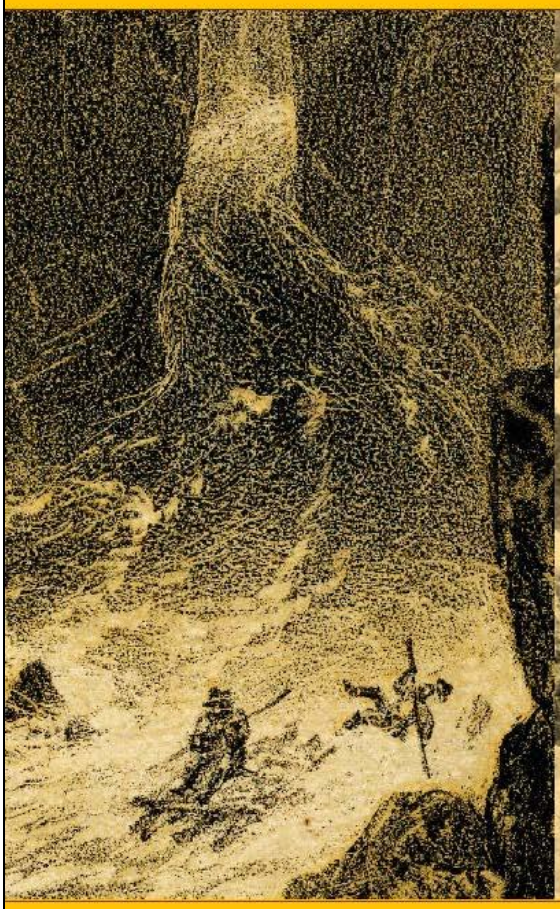
◀▼ *Facing page and below (from Plates 31 and 32 of* View Finders, Volume 2*).*

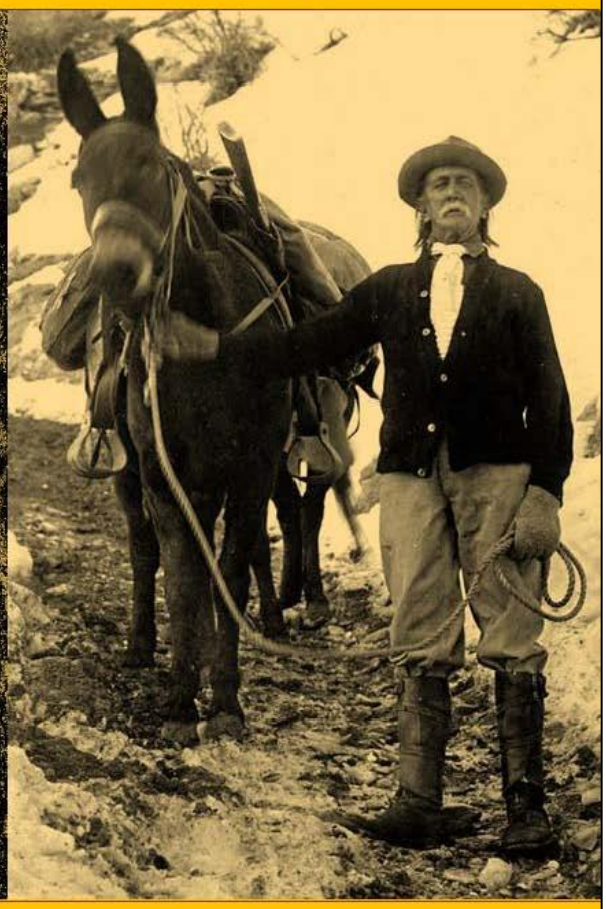
Two undated Fred Harvey postcards from the Detroit Publishing Co. depicting "The Rendezvous" (lobby) of El Tovar Hotel.

These two cards are the same photograph. In the upper card, the two women and three seated men (one with the women, back to the camera and not too visible, the other two by the fireplace) have been artistically added. In addition to differences in coloration and the retouching of the carpets, the lower card has removed the two women, replacing them with men; the man seated closest and with back facing to the camera has been made more prominent, and four more men have been drawn in; only the two men by the fireplace are unchanged.

Below is a detailed comparison of the two cards, depicting how the artistically added staffage has been altered.

"It was this way..."





The Grand Canyon's Indubitable
James White & John Hance

An Introduction and Annotated Bibliography

CHAPTER 10

"It was this way . . ."

THE GRAND CANYON'S INDUBITABLE JAMES WHITE & JOHN HANCE

An Introduction and Annotated Bibliography (2023)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2023/05/It_was_this_way.pdf (7 MB, 134 pp.)

PREAMBLE

IN AUGUST 1869, John Wesley Powell, with five men and two boats, looked forward to reaching the confluence of the Virgin River and civilization again as they drifted through the great portal that the Colorado River has carved into the Grand Wash Cliffs, the river's exit from the Grand Canyon. It was the conclusion of a monumental expedition from Wyoming, begun with four boats and ten men. En route, four of the crew left the expedition—one not long after they started, and three within just a couple of days of what turned out to be the end of the trip. One boat had been wrecked on the Green River, and another was left behind in the Grand Canyon when the trio departed up a side canyon since named Separation Canyon.

Powell surely was aware of the fact that one man, on a beaten raft, was reported to have unwittingly passed through the Grand Wash portal two years earlier, having bowled through the entire Grand Canyon from somewhere in southern Utah. It may have been a confused tale. No one seems to have known for sure, except for the traveler himself, James White, wrecked by starvation and exposure, and those who had interviewed the man after his rescue at Callville, Nevada, miles below the portal.

However, Powell had to have known, simply because the White story already was known when he was indirectly mentioned in a debate in the U.S. Senate over a joint resolution to authorize the Secretary of War to furnish supplies to Powell's proposed Colorado River expedition to explore the Grand Canyon. With a vested interest, Powell should not have been oblivious to the proceedings, which are recorded in the *Congressional Globe* for May 25, 1868.[2] White was not mentioned by name. The entire exchange is as follows:

> Mr. [Lyman] Trumbull [Senator from Illinois]. . . . The Colorado river, as laid down upon our maps, for some six or seven hundred miles has never been seen by a civilized man.

[2] "Powell's Colorado Expedition," *in* F. Rives, J. Rives, and George A. Bailey, *Congressional Globe: Containing debates and proceedings of the Second Session Fortieth Congress . . . .* City of Office of the Congressional Globe (City of Washington), Senate, May 25, 1868, pp. 2563-2566. [The House debate on May 11, pp. 2406-2408, did not mention the White affair.]

> Mr. [John] Sherman [Senator from Ohio]. It was run recently, during the last fall, I believe, by three men to escape the Indians, and one of them got through alive.
>
> Mr. Trumbull. The whole distance?
>
> Mr. Sherman. Yes; to the Great Cañon.[3]
>
> Mr. Trumbull. I was not aware of it. Is that authenticated?
>
> Mr. Sherman. Yes; the man lives. He went in at one end and came through at the other."[4]

Later in the debate, Senator John Conness of California made reference to General William J. Palmer's "reconnoissance in connection with what is called the eastern division of the Pacific railway route," noting that the general had "crossed the country from Albuquerque to the Colorado river," adding that Palmer "furnished me with an article contributed to a magazine, giving an account of what is known of the Colorado river, of the upper part of it, and also an account of the progress of the three men spoken of through a portion of the cañon of the river."[5]

Furthermore, the secret diaries of a couple of Powell's crew members, written during the 1869 expedition, mention the White affair; they agreed that it had to have been an impossible journey, which reveals that during the expedition some talk may have come up about White.[6] How they came to know

---

[3] The Grand Canyon has been known by several names. See a summary by Earle Spamer, "Big Canyon, Great Canyon, Grand Canyon: The Mysterious Evolution of a Name," *The Ol' Pioneer* (Journal of the Grand Canyon Historical Society), Vol. 33, no. 1 (Winter 2022), pp. 8-18. [See also Spamer, *Naming the Grand Canyon* (Raven's Perch Media, 2024).]

[4] "Powell's Colorado Expedition," p. 2563.

[5] "Powell's Colorado Expedition," p. 2564. The reference to the magazine article surely was the just-published item by C. C. Parry, "Account of the passage through the Great Cañon of the Colorado of the West, from above the mouth of Green River to the head of steamboat navigation at Callville, in the months of August and September, 1867, by James White, now living at Callville. Reported January 6, 1868, to J. D. Perry, Esq., Pres't of the Union Pacific Railway, Eastern Division, by C. C. Parry, Ass't Geologist, U. P. R. Surv.," *Academy of Science of St. Louis, Transactions*, Vol. 2, pp. 499-503. The Palmer volume was a privately published work, *Report of surveys across the continent, in 1867-'68, on the thirty-fifth and thirty-second parallels, for a route extending the Kansas Pacific Railway to the Pacific Ocean at San Francisco and San Diego. By Gen. Wm. J. Palmer. December 1st, 1868.* (W. B. Selheimer, Printer, Philadelphia, 1869).

[6] Michael P. Ghiglieri, *First through Grand Canyon : the secret journals and letters of the 1869 crew who explored the Green and Colorado Rivers* (Puma Press, Flagstaff, 2003). George Bradley makes mention of the affair on August 10, 1869, at the Little Colorado River (p. 200) and again on August 13, at Hance Rapid (p. 205); and Jack Sumner also mentions White by name on August 13 (p. 206).

of the story, whether it was through Powell or one of the other men, though, is not stated. By 1869, writers had already whisked White's concise story into print, a story that then was gleefully picked up across the country and in Europe—"A Drift for Life," most of those titles read enticingly. *(See the James White annotated bibliography.)* Regardless, Powell never paid White any mind, then or later. It wasn't an explorer's tale of findings, just maybe a broken survivor's brief, anxious tellings of despair. White, while he seems to have *intended* to go down the river on purpose, in order to escape trouble, was not attempting to chart the river's course and the country thereabout; he was only on the river to find a way to get off of it. To Powell, if the story was true it didn't count.

In the century and a half since, White's story has been squeezed through the wringers of support and denial both—even if by accident, he really did go through the canyon! no way he could have! And in any case, Powell did get through, marvelously—on purpose. The Powell adventure was closely attended to even before he departed from Green River, Wyoming. Once under way, writers awaited with wondrous anticipation and anxiousness for news of the expedition's journey through the Great Unknown (a term used by Powell in his 1875 narrative but thus misattributed to him, having actually been a newspaperman's turn of phrase before the expedition set off [7]). Despite false

[7] Richard D. Quartaroli explained: "[The term 'Great Unknown'] is one part of many classic quotes from Major John Wesley Powell, often recited on Grand Canyon river trips as boaters pass the junction of the Little Colorado River tributary with the main Colorado River. Powell wrote this about his 1869 river expedition in an 1875 official report to the U.S. Congress, via Professor Joseph Henry of the Smithsonian Institution, June 16, 1874. This is not a Powell journal entry, and neither he nor his crew mention the term 'Great Unknown.' In fact, Powell did not coin the term. It is unknown who did, but it appeared in an unattributed front-page newspaper article in *The Cheyenne Leader* the day after Powell and his nine men launched four boats on the Green River, from Green River City, on May 24, 1869. Powell 'has started out with the view to exploring, if possible, the great Colorado river. The undertaking is a risky and dangerous one, in view of the fact that each attempt to penetrate the great unknown has proved a failure.'" (Richard D. Quartaroli, "John Wesley Powell and crew's 1869 Grand Canyon river mapping: What did they know and when did they know it?" [abstract]. *Mapping Grand Canyon Conference : February 28-March 1, 2019 : Arizona State University, Tempe* [Arizona State University, Tempe], p. 16. [*Note*: At the time of presentation the title had been changed to " 'The Great Unknown' of river mapping: What did Powell and the 1869 crew know and when did they know it?" Video recordings of each presentation at this conference were posted online at this website:https://lib.asu.edu/mapping-grand-canyon-conference/program; last accessed April 16, 2025.] *The quotation here is taken from Quartaroli's written draft for another presentation.* Quartaroli credits a personal communication from Don Lago for the original information that appeared in *The Cheyenne Leader*, Tuesday, May 25, 1869 (Vol. 11, no.

news items that the Powell expedition had perished,[8] during his return home through Utah Powell was already lecturing on the successes, deprivations, and sad departures of the expedition. He wrote ahead to eastern newspapers, too; and news quickly spread as far as Europe.

Three Mormon men, Henry W. Miller, Jacob Hamblin, and J. W. Crosby, had also in 1867 drifted down that part of the Colorado from the Grand Wash to Callville, on purpose (and preceding White). They were seeing if a "good road" could be made to the river, and how safely the river ran, which could connect commerce and travel more directly to St. George, Utah, and the remainder of the Mormon country. Their trip was informative and uneventful despite some rapids that were encountered. The scenery did not impress them except perhaps the "gloomily grand part of the river" where it passed through Boulder Canyon on the way to Callville.[9] If James White's adventure had been an abbreviated affair—some have suggested he entered the river below the Grand Canyon—it does not explain how he got to be in such bad shape before his rescue from a stretch of river that wasn't all that bad.

White did nothing to promote the Grand Canyon; but Powell did, to world acclaim. Once the Grand Canyon had become a subject of amazement throughout the reader's world, curious tourists began to arrive on the South Rim a couple of decades after Powell's downriver trips. And there, most of them wound up in the accommodation of John Hance, rancher and miner, who had now fancied himself a hotelier. He set up a cabin, tents, and corral at Glendale Springs, on the verge of the canyon's edge at the head of the side canyon named Hance Creek. He scuttled out a trail of sorts in the side canyon, part of which was in a few years wrecked by the elements (the so-called Old Hance Trail, which is not even a route now). He laid out a better trail in nearby Red Canyon (the New Hance Trail, not maintained). For a fee he guided tourists down his

213), p. 1, column 1 (accessed by Quartaroli online at Wyoming Digital Newspaper Collection, March 18, 2021).

[8] For example, *The Chicago Tribune*'s July 3, 1869, stacked headlines: "Fearful Disaster. Reported Loss of the Powell Exploring Expedition Confirmed. Twenty-one men Engulfed in a Moment."

[9] Henry W. Miller, "Explorations on the Colorado" *in* Correspondence [section], *Deseret News*, Vol. 16, no. 27 (July 3, 1867), p. 209 [with editor's introductory paragraph]. Also reprinted in Liverpool in *Latter-day Saints' Millennial Star*, Vol. 29 (August 24, 1867), pp. 539-541.

trails; for a bit less, they could try their luck alone, mounted or not. One may wonder just how many times he went down and up his trails, whether to his cabins or mines or as a guide, but his count might not have been precise anyway. No one knows just when he got the idea to spin a tall tale for his canyon guests, but it was a part of his personality. Once begun, like digging the Grand Canyon, he was impossible to stop.

Hance’s reputation preceded him. For some he *was* the destination at Grand Canyon! Once the Santa Fe Railway effectively monopolized the hotelier’s business in the quickly growing village of Grand Canyon, Arizona, in the first years of the twentieth century, Hance moseyed over there at times to continue his made-up ministrations. By 1905 he was embedded in the village (just in time, too, to wander into the lobby of the railroad’s brand new, rustically top-flight El Tovar Hotel). His move was worthwhile; the railroad’s Fred Harvey managers had seen a good thing in the entertaining one-man tourist trap. For most of the rest of his life he was on payroll, with room and board (but not in the comfortable hotel). He was advertised as if he were part of the scenery. “Have *you* ever met John Hance?” travel agents teased [Fig. A]. Believe it or not, no visit was complete without Hance.

Have *you* ever met John Hance?

He's a Grand Canyon guide and a teller of stories that might be true, if—

John Hance prides himself on being the most accomplished fictionist in Arizona. He has wintered and summered at the Grand Canyon for thirty years. Hamlin Garland, in a delightful study of this pioneer guide, affirms that Hance is a most dramatic raconteur.

It's worth stopping off at Williams, Arizona, on the transcontinental trip, and taking the sixty-five miles' run up to the canyon of canyons, just to meet Hance face to face.

His tales lose their flavor when reduced to print. They require his soft, drawling, high-pitched voice, and awkward gestures. Also they require the canyon environment.

One anecdote concerns the time he escaped a pack of wild wolves by riding full tilt off the rim and jumping unafraid into the abyss. When within a few yards of the bottom, Hance saved his own life by gently leaping from the saddle. The horse met an untimely death on the rocks below. Do you ask for proof? He will show you the stones and the bones!

Story-telling is as old as the race.

The Grand Canyon is older. But what's an eon more or less amongst friends?

The point is, that no matter what the yesterday of this sublime scenic spectacle was, to-day it is the Wonder of the World. To-day happens to be the day you are on earth, too. So why not pack your grip and go there by the first Santa Fe train?

The journey is so easy and the cost so trifling, if taken as a side tour on the way to or from California.

Many travelers say that El Tovar Hotel, managed by Fred Harvey, is sufficient reason for the canyon outing. El Tovar is a home-like inn. Here, in the wilderness, you can get a tub bath, eat grape-fruit for breakfast, and scan a dinner menu that would make Broadway envious. Next door, for contrast, are Navaho hogans and Hopi adobes, housing primitive Indians. Next door, too, is that great gash in the earth, a mile deep, miles wide, and painted like a hundred sunsets.

Three days spent at the Grand Canyon equal three weeks spent anywhere else. That's a modest comparison.

One day can be given to the trail. It zigzags for eight miles down, down, down to the Colorado River. It zigzags the same distance back. You leave in the morning; you get back in the late afternoon. You wear a suit of khaki or blue jeans, or any old thing. You ride a placid mule—though volcanic if disturbed when off duty. The mule seems ninety per cent of the trip, and the canyon the remaining ten. Afterward, in memory, the values are reversed.

Maybe you have not been in the saddle for twenty years. The saddle for you to-day, plus the mule, plus the mile-deep hole. You early learn the mule's name and repeat it often when rounding the steep places. You are one of a little party, in charge of an experienced guide. The guide is used to it; you are not. There's a thrill for you at every turn; the guide is placid. But he knows the way, bosses the mules, and restores confidence.

You reach the river at noon, lunch, throw stones in the rapids, and start back uphill. How far and tall the cliffs are! How distant the hotel on the rim is! You get to the top eventually, tired but happy—happy in having had a unique experience.

Next day ride on the rim boulevard and see the sunset from Hopi Point. The day after, go to Grand View and see an entirely different section of the canyon. Both jaunts in easy coaches.

Stay a few days more and try one of the many camping trips, if time can be spared.

If all this appeals to you, write to Mr. W. J. Black, Passenger Traffic Manager of the Santa Fe, 1064 Railway Exchange, Chicago. Ask him for copy of an illustrated booklet, "The Titan of Chasms." The cover is a four-color reproduction of an oil painting of the canyon by W. R. Leigh. Inside are articles by Powell, Lummis and Higgins, with full information about what to see, what to do, etc.

Santa Fe
All the way

Fig. A

Santa Fe Railway advertisement, placed widely in magazines around 1913.

INTRODUCTION

Owning the Grand Canyon

WHEN IN 1883 the Atlantic & Pacific Railroad completed its trackway across northern Arizona, its division point at Peach Springs offered the traveling public access to the Grand Canyon for the first time. Julius Farlee was quick to capitalize (somewhat) on this, advertising an imaginative, elaborate stage conveyance into the canyon, which followed Peach Springs Wash and Diamond Creek to the Colorado River. In those days there were no concessionaires, no national park nor monument, and the local Hualapai people at Peach Springs only tolerated the invasion of the railroad and the people who came with it. Tourists, not knowing what to expect, came and went in the wee hours of the night, such was the usual schedule of the once-a-day trains. All of Farlee’s services were rudimentary, to say it kindly. Down along the wash, at the Diamond Creek confluence, he put up a shack of a “hotel,” a claptrap affair without doors or windows; and to get there one bounced in and out of a jarring, springless buckboard, or meandered for miles wearily aboard saddle on an animal that may not have been the best selection for the trip; a few even slogged on foot. “Guiding,” such as it was, was usually left to an employee who could be interested or somnolent. Meals rustled up by the guide were canned, if one was lucky; sometimes they were an afterthought, and the unwitting campers and guide alike scrounged for uncomplementary scraps, and hungered. Once there, they could look at the river, or poke around in the lower part of Diamond Creek, or maybe clamber part way up the canyon walls for a scenic view. Then it was back to the “hotel” or to the thin excuse for civilization at Peach Springs and the railroad depot for the ride away.

A few people in the fledgling town of Flagstaff, also on the railway and more booming because of its lumber businesses, soon capitalized on the presence of the “grander” eastern portion of the canyon nearby. Although the sixty-or-so-mile venture by wagon from the railroad was more ambitious than was the shorter but rocky, dusty, sun-drenched descent into the canyon at Peach Springs, more people began to show up for the more organized adven-

ture out of friendlier Flagstaff. There were at least waystations for the change of horses, where they could grab bites to eat, too (trail fare, but fair).

John Hance’s cabin and tent accommodations for visitors at the canyon rim—Glendale Springs—was about ten miles southeast of the present-day Grand Canyon village. (We learn—no lie—he could even offer up a properly cooled beer.[10]) So in short order, Hance’s was the favored destination. Sometimes–miner Peter (Pete) Berry soon thereafter offered a somewhat more sumptuous, though still rustic, hotel at Grand View, not far to the northwest of Hance’s place. Both places offered conducted trips into the canyon; some visitors experienced both, but most went to Hance’s. His offerings, at least at first, could be downright harrowing, sending his guests in several places down (and necessarily back up) steeply pitched or dangling ropes along Hance Creek. Berry’s Grandview Trail was just plain steep, but it didn’t go all the way to the river, just to his copper mine in the canyon. Later, Hance bumped up his offerings—and stories to go with them. It was a perfect match: Hance, his gully attraction and an uncanny sense for a tourist’s gullibility. His visitors arrived first by wagon directly from Flagstaff. By 1901 they came by rail from Williams to the facilities in Grand Canyon village, so Hance gradually retired from his hotel and sometimes–mines to become the village entertainer who generations of travelers on the Santa Fe came to expect would be on hand. His stories were retold; many of them wound up credulously in print. For recognition, he pretty much eclipsed the Santa Fe’s Fred Harvey juggernaut that encouraged and even advertised Hance’s continued colorful conversations.

When John Wesley Powell, truly the first *explorer* of the Grand Canyon, arrived at Hance’s Glendale Springs with an international group of geologists in 1891—his only trip to the South Rim—neither he nor Hance seemed to have had anything to say about each other. This is unusual. Powell enjoyed promot-

[10] In September 1895, Hugo Fromholz from Germany, after arriving at Hance’s, “took a late meal, which the friendly wife and two lively daughters of the innkeeper [who leased Hance’s ranchsite] brought to me; but after the exhausting, if not very dusty, journey of twelve hours, it didn't really taste good. But a bottle of Milwaukee beer, stored in a cool spring [had a] wonderful freshness and such an excellent taste as I seldom found in America, where the beer is enjoyed overly icy and thus spoils the taste.” (Translated here, from Fromholz, *An den Küsten des Pacific. Reisebriefe von Hugo Fromholz* [*transl.* ‘On the Shores of the Pacific. Travel Letters from Hugo Fromholz ’] [Druck von August Hoffmann, Berlin, 1897], p. 92.)

ing his work; Hance regaled in his own experiences, true or pretentious. Powell wrote nothing about his return to the canyon, nor did the press make much out of it, a long fall from the eager attendance to his exploits as the Colorado River’s “conqueror” in 1869 and 1871-2. But Hance’s silence seems to be even more peculiar; his yarns mention only one visiting geology class, and it wasn’t Powell’s. Nor among anyone with the 1891 group was there any report of hearing about the man who, twenty-four years earlier, may have usurped Powell by two years as the first *venturer* on the Colorado River through the canyon—James White, who was fished from the river in 1867, utterly spent, far downstream from the Grand Canyon’s outlet.

While Hance probably did know of the White affair through conversations with his guests over the years, there’s no evidence that he ever spoke about it (or tried to horn in on White’s awarded notoriety); and Powell had been almost silent on the matter ever since his first river expedition. It must be said that White and Hance, despite never having met, would have offered little room for conversation points. The soapbox could not accommodate *two* reputed liars (White is perhaps unfairly so branded, but Hance relished it).

This did not mean that others kept silent. Frederick Dellenbaugh was a seventeen-year-old member of Powell’s second expedition on the Colorado in 1871–2, remaining with the Powell survey for several years during its mapping and reconnaissance phases in southern Utah and northern Arizona. He was for the rest of his life a champion for Powell’s legacy. He wrote in his own 1902 narrative of his river expedition with Powell, *The Romance of the Colorado River*, that White’s account was a “Masterful Fabrication,” “one of the best bits of fiction I have ever read,” and “a splendid yarn,” labeling the man a “champion prevaricator.”[11] (This contrasts directly with John Hance’s marque, by J. A. Munk in 1905, as the “Grand Cañon Guide and Prevaricator.”[12]) Later in the twentieth century, even the magisterial historian Wallace Stegner flatly opined

[11] Frederick S. Dellenbaugh, *Romance of the Colorado River* (G. P. Putnam’s Sons, New York and London, The Knickerbocker Press, 1902), pp. 158, 175, 183. Dellenbaugh devoted eight pages of his book to the White affair (pp. 175-183).

[12] Joseph Amasa Munk, *Arizona Sketches* (The Grafton Press, New York), p. 143.

that James White "was one of the West's taller liars."[13] Even to compare White to the giant, John Hance, would be fightin' words.

One might pause to point out that Powell himself is also accused of misleading his audience. It's well appreciated that his major Colorado River narrative, a well-illustrated government report published in 1875 and rejiggered more commercially in 1895, merges events of his 1869 and 1871–2 river expeditions, eliminates the second expedition's crew, and hands over very embellished prose about the adventure. Powell in every way (in the Grand Canyon–Colorado River literature at least) has always been bigger than life. He was made out to be a courageous explorer in his day—they all said so—and he was a military hero, too, working now with but one hand, the right one lost in the war, which only on occasion was a hindrance. Not to be outdone by the likes of James White, there is his description (and an artist's imaginative drawing of the scene, "The Rescue") of Powell, dangling on a cliff face, being hoisted up by his one hand grasping the drawers a companion who had removed them for the duty (though the illustration shows that man clothed[14]). The incident took place in Desolation Canyon on the Green River in Utah, but to amplify the effect of the story there was yet another incident of dangling, "suspended 400 feet above the river" he said, in the Grand Canyon itself. Not only have we believed Powell, but the "drawers" incident (not to mention the gripping illustration) has been reproduced quite to death ever since.

What appears on the pages that follow is an introduction to Messrs. White and Hance, and the documentation that either backs up or beats down their tales. The texts here and the citations in the bibliographies that follow are restricted mostly to books and magazines; the profusion of widely scattered newspaper accounts are overlooked.

While it has been easy to follow the oscillating arguments about White, for or against as his supporters and detractors have pronounced and harangued over the decades right up to today, Hance's own stories have been relegated to the capricious banterings of repeaters and hearsayists. There is

[13] Wallace Stegner, *Beyond the Hundredth Meridian* (Houghton Mifflin Co., Boston, 1954), p. 33.

[14] Nathan Hale's young-reader title, the graphic-novel format *Major Impossible* (Amulet, New York, 2019), is playfully a bit more explicit in depicting the scene.

the story of him and his horse, of course, in one variant of which they leap, falling into the canyon in a grand escape from danger; in another they attempt to jump clear over the canyon (but didn’t make it, in several different ways). And then there was the time he was snowshoeing across the chasm atop a heavy fog, when it suddenly lifted (also with variations). Priceless.

But not for a price have I found many of these versions in *contemporary* publications—and for good reason. Hance didn’t have a script. For that matter, neither did his chroniclers, those who bothered to merrily repeat the man’s anecdotes and eye-squinting whoppers. No story of his was or will be the same; and in fact he never wrote down any of his tellings, leaving it all to others. Copyrights? None are Hance’s; so when the stories were written down, the variations were the writers repolishing something that may not have needed it. We are entirely at the mercy of retellings, which will forever remain uniquely a part of the Grand Canyon. Probably no one will be able to prove any one of Hance’s stories is as he told it that day—maybe even that he never told one or another at all, for all we know. But that’s what he said, so we’re told. Without question, John Hance owned his audiences.

“He said” is probably one of the most powerfully concealing and complicating phrases in historical writing. It is, though, perfect for a general audience who may not have patience for footnotes (and bibliographies!), who may prefer the tidbits served neatly and without fuss. The relatively few items in print that come down to us from Hance’s time are propped up by a remainder that is dispersed in articles and books that look back on when the Grand Canyon was under Hance’s management. Now, generously salted web pages continue the tradition, sustained by that authoritatively modern form of corroboration, “—what *he* said.”

THERE WERE some parties, too, who did say they (or were said to have) *owned* the Grand Canyon. Their claims were implied if not implausible. But that’s what they said.

Joseph Wild concisely observed, without further remark, “The Santa Fe [Railway] insists you shall see its own private Grand Canyon,” further positing,

"The tourist finally wonders if Fred Harvey is the real owner."[15] If it ever turns out that Hance hid some deed of ownership from his later employer, Fred, it was Edith Sessions Tupper, one of the early writers to come to terms with the *tradition* of John Hance, by which one may contemplate differently:

> All the way from Albuquerque you have heard of John Hance. You have read about him in all the guide-books you have bought. People whom you meet tell you about the flapjacks he will cook for you at the cañon camp. You constantly hear references to "Hance trail," "Hance's new trail," "Hance's old trail," "Hance's Peak," and "Hance's cabin," until you wonder if John Hance owns the Grand Cañon of the Colorado River.[16]

And this was just when Hance was beginning to ease out of his hotel and supposed mining businesses in the eastern part of the canyon, who in another decade would partake of the *nobelesse oblige* of Fred Harvey at the ever-growing, ever more crowded, village of Grand Canyon, Arizona, who by the time the canyon was made a national park would be resting in the Grand Canyon Cemetery (though not as the first interee, as some have it).

There are as well the well-rehearsed retellings about newspaper magnate William Randolph Hearst's acquisition of rim-side property at Grand View, along with some mining claims in the canyon. There are, too, the contentious claims staked by Ralph Cameron, politician and pretend miner, all along the Bright Angel Trail, which conveniently allowed his hooligans to operate it as a toll road and carry out some lucrative private business on the side. Even after Cameron went to Washington as an Arizona senator in Congress, the issue of his ownership of these claims boiled over across the aisles and into the courts, eventually against his favor. Various other private inholdings had been in place along and in the Grand Canyon, but no one, it seems, ever claimed that they owned the *entire* Grand Canyon. Except . . .

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[15] Joseph Wild, "California Rediscovered—1919," *Commerce and Finance*, Vol. 9, no. 3 (January 21, 1920), p. 113. [The Fred Harvey company managed the Santa Fe's off-track amenities, as well as aboard the dining cars. See for example, Stephen Fried, *Appetite for America: how visionary businessman Fred Harvey built a railroad hospitality empire that civilized the Wild West* (Bantam Books, New York, 2010).]

[16] Edith Sessions Tupper, "In the Grand Cañon of the Colorado," *Frank Leslie's Popular Monthly*, Vol. 41, no. 6 (June 1896), pp. 679-680.

There was Solomon Barth, a Polish/Prussian emigrant of Jewish descent who traded, freighted and gambled his way through Arizona during the latter half of the nineteenth century (and was in politics and for two years a convict held in the infamous Yuma Territorial Prison). He supposedly acquired the Grand Canyon in a trade with American Indians in the 1860s. Although a brief scholarly biography of Barth[17] takes no notice of this, read some meager, second-hand bits and pieces in the publications listed below. Although the one by Sol's great-grandson, Charles B. Wolf, seems to hold promise for documentary evidence in its brief Chapter 2—"1860s: Sol 'Owns' the Grand Canyon" — it does little to provide information. The chapter title is based solely on a couple of comments, probably parts of family tradition. Sol is said to have had grazing and trading rights through a "formal treaty" with the Navajo along the Little Colorado River, "all the way to the Grand Canyon." Wolf declares, without any elaboration or source, "At some point, Sol sold some of the south rim of the Grand Canyon to the Santa Fe Railroad," which should be an easy thing to substantiate in Santa Fe and county records, but after this remark Wolf proceeds straight to a concluding paragraph about Sol's birthplace. James White and John Hance redux; maybe truth, maybe not.

Fierman, Floyd S.

1985 *Guts and ruts : the Jewish pioneer on the trail in the American Southwest.* New York: Ktav Publishing House, 217 pp. [See p. 185, note briefly regarding the putative ownership of Grand Canyon by Solomon Barth.]

Koppman, Lion, AND Koppman, Steve

1996 *A treasury of American-Jewish folklore.* Northvale, New Jersey: Jason Aronson, Inc., 390 pp. [See "He Got the Grand Canyon in a Trade," p. 10, briefly regarding the putative ownership of Grand Canyon by Solomon Barth.]

The Nation of Islam, Historical Research Department

2006 *The secret relationship between Blacks and Jews.* "Internet": AAARGH Publishing House, 222 pp. [See p. 102, *note* 532, briefly regarding the putative ownership of Grand Canyon by Solomon Barth.]

Postal, Bernard, AND Koppman, Lionel

1978 *Guess who's Jewish in American history.* New York: New American Library, 322 pp. [See p. 50, note briefly regarding the putative ownership of Grand Canyon by Solomon Barth.]

[17] N. H. Greenwood, "Sol Barth: A Jewish Settler on the Arizona Frontier," *Journal of Arizona History*, Vol. 14, no. 4 (Winter 1973), pp. 363-378.

Rochlin, Harriet, AND Rochlin, Fred

1984 *Pioneer Jews : a new life in the Far West.* Boston: Houghton Mifflin and Co., 243 pp. [See p. 78, note briefly regarding the putative ownership of Grand Canyon by Solomon Barth.]

Tigay, Alan M.

1987 (ED.) *The Jewish traveler :* Hadassah Magazine*'s guide to the world's Jewish communities and sights.* Garden City, New York: Doubleday, 400 pp. [See under Phoenix, p. 406, note briefly regarding the putative ownership of Grand Canyon by Solomon Barth.]

Wolf, Charles B.

2002 *Sol Barth of St. Johns : the story of an Arizona pioneer.* [No place]: 1st Books, 90 pp. [An on-demand publication.] [Solomon Barth; book written by his great-grandson. See Chapter 2, "1860s: Sol 'Owns' the Grand Canyon," pp. 4-7.]

Then, perhaps unexpectedly, there is Ernesto "Che" Guevera, the Marxist revolutionary of twentieth century Argentina, who might somehow have nearly been an heir to the whole Grand Canyon.

Che's great-grandfather inherited, through marriage, the land of Don Guillermo de Castro, which supposedly was geographically broad enough to encompass the canyon. We have this on the say-so of Che's father, Ernesto Guevera Lynch, who was quoted at the start of a biography of Che by Josef Lavretsky (pseudonym of the Soviet unofficial intelligence agent Josef Grigulevich). The book was published in several languages and is quoted here from the 1976 English translation (see below for listings).

Guevera Lynch said,

> As for my grandfather, the marriage made him the inheritor of all of Don Guillermo de Castro's properties, including the Grand Canyon. I'll point out right now that all of this land and the Grand Canyon were then deceitfully annexed by the American authorities [through the 1848 Treaty of Guadalupe Hidalgo]. Our family waged a long battle in court. The matter went to the Supreme Court which took the side of the authorities, and we were left with nothing but court expenses, which added up to what was at that time a fabulous sum. However, we won't make a point of complaining on that score. After all, if they had returned the land to us, who knows, maybe our family's destiny would have been

altered and instead of producing the heroic figure of Major Che, who gave his life for the freedom of America, we would have turned out just one more rich and idle lounger to litter the landscape.

Lavretsky, J. [Лаврецкий, И.] [Lavretsky, Josef] [*pseudonym of* Iosif Romual’dovich Grigulevich (Иосиф Ромуальдович Григулевич)]

1972 *Эрнесто Че Гевара.* Москва: Издательство ЦК ВЛКСМ “Молодая гвардия,” 348 pp. (Жизнь замечательных людей. 1972. вып. 5 (512) [In Russian.]

TRANSLITERATION: *Ernesto Che Gevara.* Moskva: Izdatel’stvo TSK VLKSM “Molodaya gvardiya,” 348 pp. (Zhizn’ zamechatel’nykh liudei. Seriia biografii, vyp. 5 (512).)

TRANSLATION: *Ernesto Che Guevara*. Moscow: Publishing House of the Central Committee of the Komsomol “Young Guard,” 348 pp. (Life of Wonderful People. 1972. Biographical Series, no. 5 (512).)

NOTE: ВЛКСМ = Всесою́зный ле́нинский коммунисти́ческий сою́з молодёжи (All-Union Leninist Communist Youth Union [VLKSM], or Komsomol, short for Communist Youth Union).

1973 *Эрнесто Че Гевара.* [*Ernesto Che Gevara.*] Moskva: Molodaia gvardiia, 2nd ed., 346 pp. (Zhizn’ zamechatel’nykh liudei (“Molodaia gvardiia”), vyp. 512.) [In Russian.]

1974 *Che Guevara.* (Maria Teresa Rojas, translator.) [Bogotá, Colombia]: Ediciones Suramérica, 414 pp. (Colección América latina.) [In Spanish.]

1975 *Ernesto Che Guevara.* (Mathias Moll, translator.) Frankfurt (am Main): Verlag Marxistische Blätter, 491 pp. [In German.]

1976 *Ernesto Che Guevara. I. Lavretsky.* (A. B. Eklof, translator.) Moscow: Progress Publishers, 310 pp., errata slip. [English translation; also reprinted 1985, 1989.] [See pp. 10-11, which quotes Che Guevara’s father.]

1976 *Eṟṉasṭō Cē Kuvērā.* (Cantikāntan, translator.) Ceṉṉai: Niyū Ceñcuri Puk Havus, 392 pp. [In Tamil. Translated from the English translation, *Ernesto Che Guevara*, which was in turn translated from the original in Russian.]

1978 *Ernesto Che Gevara.* Moskva: Molodaia gvardiia, 3rd ed., 346 pp. (Zhizn’ zamechatel’nykh liudei. Seriia biografii, vyp. [No.] 9 (512).) [In Russian.]

1982 *Ernesto Che Guevara : Leben und Kampf eines Revolutionärs : Biografie.* [*transl.* Ernest Che Guevara: Life and struggle of a revolutionary; biography.] Frankfurt am Main: Verlag Marxistische Blätter, 2nd ed., 492 pp. [In German.]

2002 *Эрнесто Че Гевара.* [*Ernesto Che Gevara.*] Moskva: TERRA-Knizhnyi klub, 334 pp. (Portrety series.) [In Russian.]

2018 *Che : Devrime adanmiş bir hayat.* [*transl.* Che: a life dedicated to the revolution.] İstanbul: Etkin Yayınları. [In Turkish.]

To cut to the chase, there never has been anyone who truly “owned” the whole Grand Canyon; only bits and pieces, like the Hearst inholdings and the

former claims of mine workers, actual or wishful. But neither should be ignored the several Indigenous tribes who have ages-long traditional associations with the Grand Canyon, which isn’t “ownership” as insensitively interpreted by a non-Indigenous public; for them the canyon is a source of life through cultural traditions, means of survival, and indeed the very wellspring of their origins.[18]

Who, frankly, would want to *own* the canyon anyway? There is the matter of upkeep from erosion, naturally, and the liabilities of all the ways there by which a person can die?[19] But James White hadn’t been killed, nor John Hance (numerous times). The burden of remedial maintenance is one thing, but the canyon also brooks explanations about itself that don’t quite ring true to those that are traditional among non-Indigenous peoples. As a few studies have considered, it’s this way—

Spamer, Earle E.

1991 **Preserving the Grand Canyon: Final Report.** *Journal of Irreproducible Results*, 36(5): 4-6. [This was also reprinted with different illustrations in *Nature Notes* (Grand Canyon National Park), 12(1) (1996): 1-3.]

1997 **The Grand Canyon—Further final report, and users' guide.** *Annals of Improbable Research*, 3(4): 15-18.

2006 **Is the Grand Canyon a fake?** *Annals of Improbable Research*, 12(2)(March/April): 18-22.

2010 **What lies behind the Grand Canyon?** *Annals of Improbable Research*, 16(5) (September/October): cover, 1, 6-10.

Digital users: Each PDF symbol links to Spamer’s Academia.edu web page where the item may be downloaded. [Links still valid April 2025.]

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[18] For an introduction to resources see Earle E. Spamer, *Bibliography of Native Americans Traditionally Associated with the Grand Canyon* (Raven’s Perch Media, 2nd ed., 2023, https://ravensperch.org). The tribal peoples are the Havasupai, Hopi, Hualapai, Navajo (Diné), various Paiute bands, Yavapai-Apache, and Zuni. [An revised and updated 3rd edition was produced in 2025.]

[19] Michael P. Ghiglieri and Thomas M. Myers, *Over the Edge: Death in Grand Canyon: gripping accounts of all known fatal mishaps in the most famous of the World’s Seven Natural Wonders* (Puma Press, Flagstaff, 2001; 2nd ed., 2012). See also the interactive map online by Kenneth Field, inspired by *Over the Edge*, https://carto.maps.arcgis.com/apps/webappviewer/index.html?id=9359a0790ffe4bc09edd6b9c17a43b90 (last accessed April 13, 2025).

On my honor, it was this way . . .

Hance Buys a Mule

(a verifiable, even if made-up, tale)

“Captain,” asked a nurse from New York City, “why aren’t you healthier, with all your going down and up the trails all day?”

“Well, Ma’am,” said Hance, “it’s true, I’m not as spry as I used t’ be—why, once upon a time I could run clear to the river down my trail, and back up, whenever I needed a drink o’ water. But I got me some help now.”

“If you can’t run up and down as easily anymore,” she replied with concern, “how do you even work your mines, in your condition? What sort of help do you have?”

“Oh,” Hance responded ruefully, “them mines warn’t such a burden at first. The mules were used to packin’ heavy sacks of ore. Yet there came a time when they couldn’t keep up with me. Every now and a while I’d have to take the mule’s sack and carry it myself. Like them, though, I ’ventually give out, too. Now I rely on my best mule, Octavia.”

“That’s a most unusual name for a mule.”

“It was my luckiest day, I tell you. A few years back, I was moseyin’ ‘bout in Flagstaff buyin’ supplies, and here a-come a mule salesman. Told me he had an eight-legged mule on his hands, but if I wanted a deal I had to act quick.”

“An eight-legged mule?! Why, I never —”

“Yes, Ma’am. Eight legs. Jus’ what I was lookin’ fer! So not wishin’ to miss out I snapped ‘er up on the spot—sight unseen, too.”

“Surely, you were fleeced!”

“Naw! Was just as advertised. Eight legs. An’ good condition. I figger’d if four legs wore out on the trail the other four could take over. Save me a lot of bother.”

“— oh, I don’t believe that for a moment, sir.”

“I figger’d you wouldn’t, Ma’am, not that I could doubt your insight into things. But I never tell no stories I can’t prove, and I got here a photo of me *and* my eight-legged mule.”

JOHN HANCE. “OCTAVIA.”

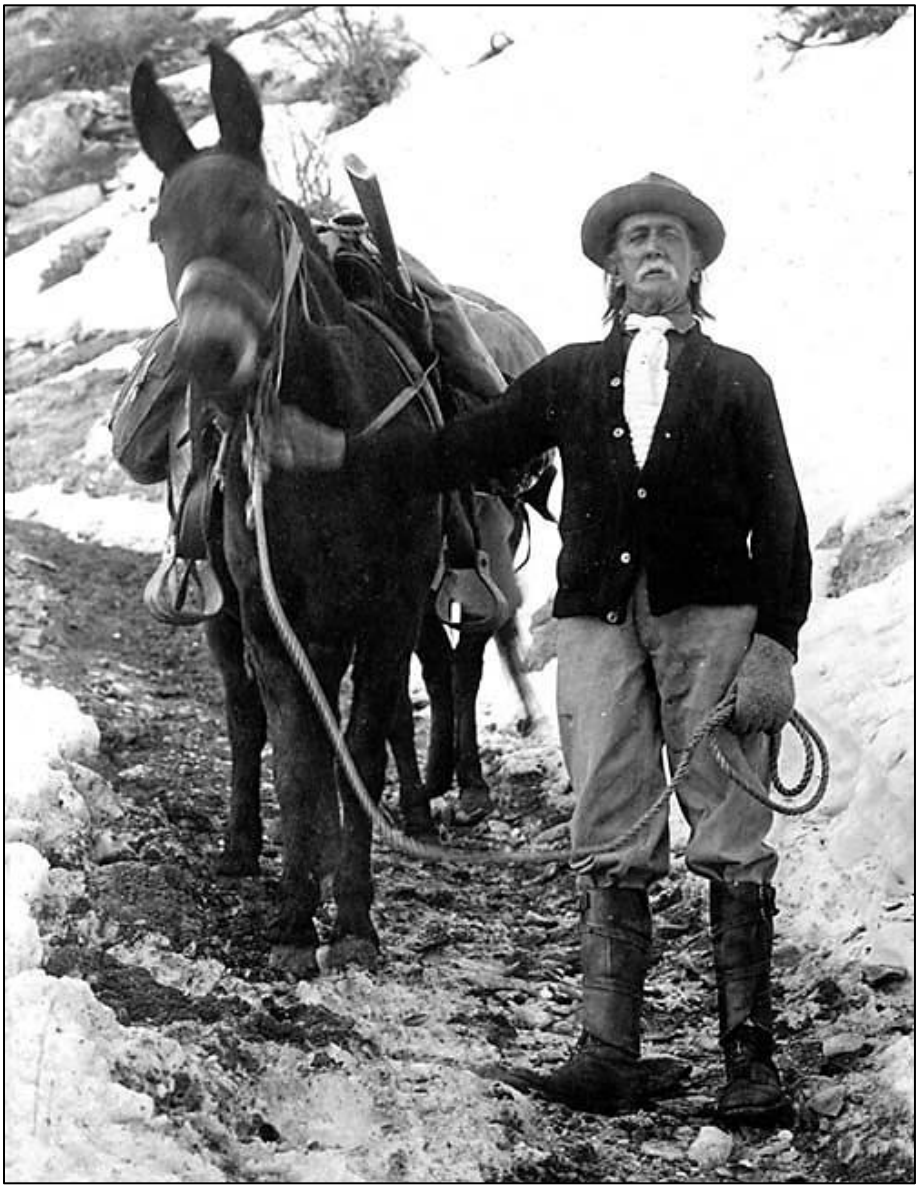
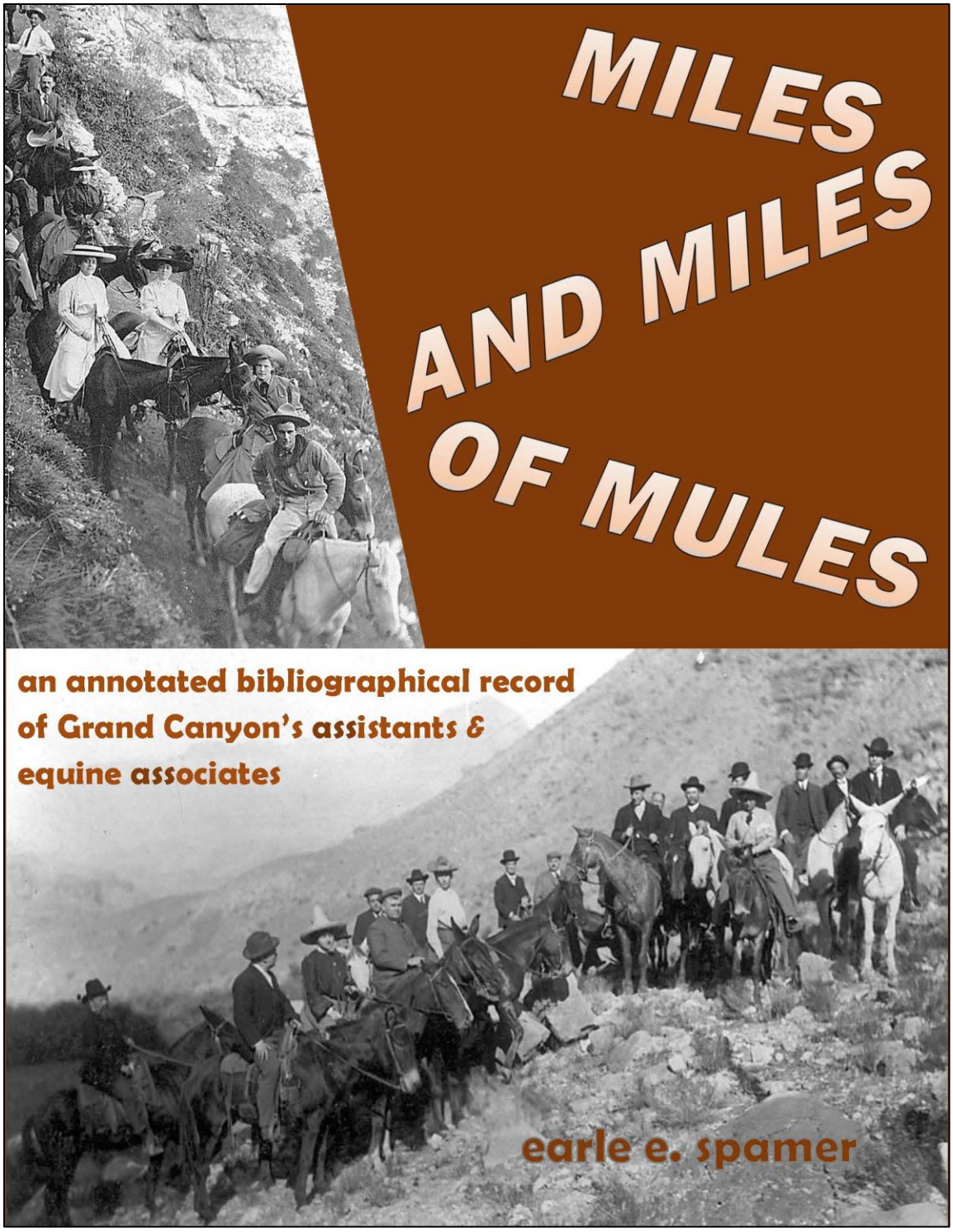


Photo National Park Service, Grand Canyon National Park
caption supplied here


MILES
AND MILES
OF MULES
an annotated bibliographical record
of Grand Canyon's assistants &
equine associates
earle e. spamer

CHAPTER 11

MILES AND MILES OF MULES

AN ANNOTATED BIBLIOGRAPHICAL RECORD OF GRAND CANYON'S ASSISTANTS AND EQUINE ASSOCIATES (2024)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2024/03/Mules.pdf (6 MB, 114 pp.)

DOWNTRAIL

IT'S SOMETHING ABOUT THE MULES. *The Grand Canyon mules*. The epitome—no, the quintessence—of the Grand Canyon experience.

They're legendary, those mules. For well more than a century, "everyone" has heard about "the Grand Canyon mules" even if they have not been to the Canyon. Riding into the Canyon was something to aspire to. Ride a Grand Canyon mule and die. A lot of riders thought that was their fate once they were on the way down the trail, or so they reported afterward, for heroic effect, or perhaps truthfully—we might never know. Riding into the Canyon was not to be missed for the world, they said, but never again.

Lest one charge me with inventing this, take but one example from the literature. We can in fact go back all the way to Lt. Joseph C. Ives, who led the first truly organized land expedition to Grand Canyon in 1858. Approaching Cataract Canyon, the headwater of Havasu Creek and the Havasupai homeland, his account of the descent ironically presages the same sorts of over-stimulated descriptions made by numerous 20th-century writers who regaled their readers about the ride down Bright Angel and other trails. He wrote: ". . . glancing down the side of my mule I found that he was walking within three inches of the brink of a sheer gulf a thousand feet deep; on the other side, nearly touching my knee, was an almost vertical wall rising to an enormous altitude."

Balduin Möllhausen, the German author, artist, and naturalist's assistant who traveled with Ives, was more graphic than the army lieutenant *(translated here)*:

> Riding on a protruding horizontal rock formation as if on the outermost edge of a roof along horrible abysses, one now also reaches places where even the sure hooves of mules can no longer find footing and only the way back remains open, a way that leads over terrible depths seeming to float freely in the air, where one likes to shade one's eyes in order not to see the rocky masses that seem to slide lazily past one another, where the stones that come loose under one's feet do not roll down noisily but fly inaudibly through wide spaces, falling heavily on

> the rocky ground far below, and the shock thus produced, but muffled by the distance, echoes eerily in the cracks and crevices.

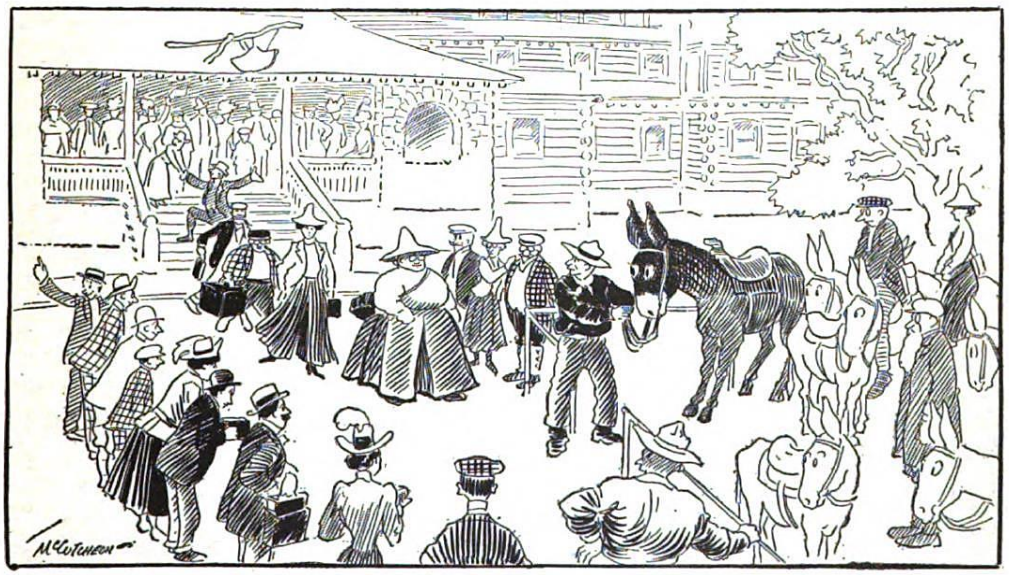
Of course, others have been positively exhilarant about the experience, but their testimonies lack daring, which takes some of the pizzazz out of the adventure.

Times change. Once, mounting an animal and riding it was ordinary. Today, visitors can come and go at Grand Canyon and never see a mule. They may not even know about the mules in the first place. That's probably a good thing, considering that reservations for trips are to be had only long in advance, like a year or more. And, one cannot be heavier—fully clothed—than 200 pounds. (They don't take your word; they check you right there on a scale at the tour desk in the Bright Angel Hotel lobby, for all the world to see especially if someone has their smartphone out.) And, one must understand English. (That will be obvious when one checks in; it is anyway not so much for the mule's benefit but to follow the guide's instructions on the trail.) Once ready to saddle up, the head guide runs through an animal- and trail-safety lesson, sprinkled with some humor but otherwise, shall we say, deadly serious. What few belongings you are allowed to carry are in a clear plastic bag; no foraging in the bag, and no picture-taking while on the mule. (That rule was in place long before "selfies." Now it means that you can't relay to your social media followers any instantaneous death-defying reportage. You and they will have to wait.) Those who do not follow the guide's instructions? The wrangler says, "we call them hikers." Flying out of an airport is not as challenging as boarding a Grand Canyon mule.

While once no one much checked the weight of prospective riders, there were exceptions, such as 200-pound Ada Neill, who went merrily "Bright Angeling on a mule." Then there were wide-eyed watchers of President William Howard Taft—all 325 pounds of him— who were probably aghast. When he was there in 1909 someone put the kibosh on a trail trip. He fairly grumbled about that in a statement he made before the House of Representatives in 1915 (as an ex-president then, he had been asked by the Secretary of the Interior to address the House during debates about the need to build better roads in the national parks). He said that at Grand Canyon there are "no roads at all except

a railroad . . . and only a trail, called the 'Bright Angel Trail,' down into the canyon—down which they would not let me go, because they were afraid the mules could not carry me . . . ."

Political cartoonist John T. McCutcheon weighed in by depicting a Grand Canyon mule trip from the perspectives of riders and burden-bearers both.



"The start from the hotel."

According to McCutcheon, this is how the trail trip goes:

> Most people go down by the Bright Angel Trail, which leads directly down from the Hotel El Tovar, and on which the round trip may be done in about eight hours. The motive power is mule-back, reenforced by a small switch which seems to have little persuasive effect, but imparts a sportylike jauntiness to the rider.
>
> The presence of one old lady will have a wonderful effect in bracing up the courage of the whole party.
>
> The caravan is halted while a young man takes a photograph of the crowd [the Kolb brothers photographers took pictures of most every trail party; see also the top cover photo of *Miles and Miles of Mules*]. When you return in the evening finished copies will be ready for you, if you wish to purchase them. Of course everybody buys a copy, for who would not give the required amount to have eternal evidence of his daring Israel-Putnam-like dash down the Grand Canyon. The photog-

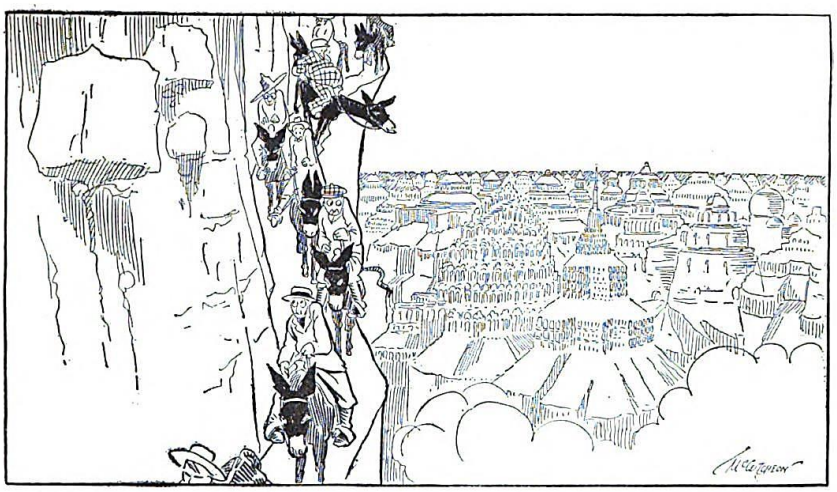
rapher is very crafty, for he posts his camera in a position overhead that makes the trail look twice as steep as it really is.

"The dare-devil photographer."

In the meantime the guide is answering time-honored questions, such as: 'Was anyone ever killed on this trail? [. . .] The guide cheerfully gives the required information, whether he knows it or not.

Many people come down and spend the night in the tents [at Havasupai Gardens], thereby getting an experience which enables them to say afterwards, "When I was roughing it out in Arizona."

By one o'clock you eat your lunch at the edge of the river, with mind somewhat clouded by the realization that you have to go back every foot of that long trip you have come. You do it, however, and at five o'clock



"As they will describe it back home."

> the caravan returns like triumphant explorers to the hotel at the top. You look for an easy chair—soft preferred—and discuss with one another your various heroisms of the day.

In 1917, Chicago Cubs pitcher Al Demaree stopped at the Canyon while enroute with the team to the West Coast. A sports writer for the *Santa Fe Magazine* sized up a mule trip on Bright Angel Trail with Demaree's details and a cartoon by the pitcher himself *(see the following two pages)*.

But occasionally there is the astute visitor who is too objective to fret. Gilbert E. Gable swore off the "lodge rituals" and gave away the Secret of the Canyon:

> There seems to be an unwritten something about going down Bright Angel Trail by which everyone who makes the trip is thereby initiated, and must ever after encourage and support the illusion that they have gone through great danger. I cannot be a member of the Lodge! I consider its tenets erroneous. The trail gave me a sense of deep emotion, but no fear. At very few places is it less than six feet wide, the grades are no steeper than those of scores of country roads in any hilly state. If you dismounted, shot your mule and pushed him over, there are mighty few places where he would roll more than twenty feet—to the next reverse course of the trail just below. Even if you blindfolded yourself and rolled over after him, you probably would be no more than bruised a bit when you found yourself safe on the next step of the path.

Yet the concessionaire's mules are not all of it. Some dedicated riders do obtain the permits necessary to ride their own mules on privately-supported trips into and across the Canyon. And even so, mules are not the only quadrupeds to tromp into the chasm. Horses have a history here, too, though the mules have won out in the heavy-lift and most inner canyon tourist categories.

Occasionally, burros and donkeys wandered into the scene. Though they are one and the same, many people see them as different animals, perhaps because of the names or perceptions of their uses. At Grand Canyon these animals are not so much for people-carrying as for carrying people's freight. Then there are those folks who have not regularly (if at all) ridden an animal

SPORTS

THE members of the Cubs' baseball party are talking still about their wonderful trip from Chicago to Pasadena. Of course their experiences at the Grand Cañon of Arizona is the most popular topic of conversation. To jot down all their witticisms, stories and fairy tales would make a book in itself, so it can't be done.

But the story Howard Mann tells of Al Demaree's trip on muleback must be given wide publicity. Demaree is a Cubs twirling prodigy, and he is something of a cartoonist, also, even of himself.

Al Demaree has drawn a picture of himself on his mule. It is shown herewith. It will be noted that the mule is a temperamental beast, with a mean, obnoxious eye. He is snorting because he doesn't like Al to hang onto his neck. He is looking over the precipice at a wisp of grass growing on a ledge 2,000 feet below. Apparently, he is wondering whether it is worth a leap or not.

"The mule did this frequently," explained Al as he drew the picture.

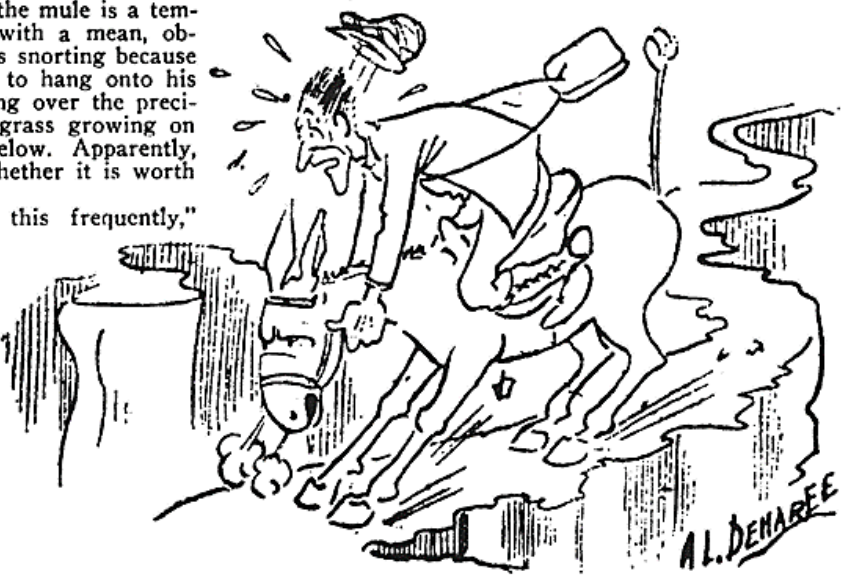
"At this point the mule was getting ready to turn one of the frequent corners on the trail. I have drawn the trail wider than it should be. It looked a whole lot narrower when I was on it. When the mule got to the corner he put all four feet together and then turned slowly around the corner, as though he were on a turntable. I'll bet one of those mules could turn aound on a nickel."

While Demaree was going down the trail he got to wondering how the mules were trained for their hazardous task. He also wondered why they persisted in walking on the outside edge of the trail. At first he thought it was because they desired to peek over the edge of the precipice and contemplate suicide.

When he got to the top he found out. A good trail mule is worth $400, and he is given a severe course of instruction before he is allowed to carry humans. He is taken up and down the trail many, many times, carrying loads of wood and provender for those who live at the bottom of the cañon. These loads are tied on his sides and stick out a couple of feet. When a mule turns a corner in the trail on the mountainside, on one hand is the wall of the chasm rising above him; on the other hand is the precipice, a sheer drop of several thousand feet. If the mule does not keep away from the wall the load will brush against the rock, so the mule very soon gets into the habit of steering clear of the wall. The result is that the mule always goes pretty close to the edge of the precipice.

He never unlearns this little trick, and the result is rather disturbing to the passengers.

The mule Demaree rode was comparatively a new beginner. He hadn't been on the job more than two years, and compared with the graybeards who had been hitting the trail since the Grand Cañon was little more than a gully, he was a sophomore. The twigs and



AL DEMAREE "VIEWING" THE GRAND CANON
Cubs' pitcher draws a picture of himself, but says he drew the trail too wide

sprouts along the way seemed to appeal strongly to him and he was forever stopping to have a look and a nibble.

"The guide told me to use a switch on the mule," says Al, "and I did, freely. After I had belted the mule several times, someone in the rear yelled at me. I thought it was the agent for the Society for Prevention of Cruelty to Animals.

"'What's the matter?' I yelled back. 'Don't you want me to beat this brute?'

"'I don't care if you beat him to death,' came back the voice, and I looked around and saw it was Mike Prendergast and not an S. P. C. A. agent.

"'Well, what's wrong?' I asked.

"'Wrong!' said Mike; 'everything's wrong. Every time you hit your mule he kicks my mule on the shins. My mule is getting sore and discouraged and I think he's going to jump off the cliff if your mule doesn't stop.'

"So I quit hitting my mule. A lot of people have asked me how I liked the scenery down in the cañon, and I've got to admit that what I saw was fine. You see, after I took one look down to the bottom I quit looking down. But I kept my eyes on the wall and I got a fine view of that all the way down and back. Sometimes I'd shut my eyes and imagine I was crossing the Sahara Desert on a camel. This kept getting easier to do as we got toward the bottom, because it got quite warm down there and it was hot enough to be on the Sahara.

"I felt a lot easier when I had my eyes shut. Every time the mule stopped I knew he was looking over the sides, and my heart stopped beating. But I got used to it after a while. You see, the guide told me about a mule that stood on the edge once and finally jumped over. He committed suicide, probably because he had been given all the heavyweights to haul and was getting discouraged.

"But my mule was young and fairly ambitious, and I figured that suicide was farthest from his thoughts. But the poor mule that carried Jim Vaughn and the one that carried Claude Hendrix—I don't see what kept them from getting together and making it a double suicide."

* * *

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and call the mules "donkeys." A donkey trip into the Canyon does sound to be quaintly fun, compared to the heavily clomping efforts of a mule train, but in any case there are no regular donkey trains.

The Grand Canyon has its share of equine history, probably equitable to any number of places in the world, though with uniquely Grand Canyon flairs. There was the burro, a one-time prospector's carry-all let loose, that became more domesticated during its wanderings between the Colorado River and the Kaibab Plateau. He became known—and beloved, and occasionally put to

"Brighty" statue and exhibit in the North Rim's Grand Canyon Lodge, July 2013. *(Author's photo)*

work—on the North Rim as "Brighty" (named, naturally, for the Grand Canyon's "Bright Angel" themes—thank you, John Wesley Powell).

He was immortalized in a widely reprinted and translated children's book, Marguerite Henry's *Brighty of the Grand Canyon*. Then, eternalized in bronze as a cute little burro, he had a harder time of it, sometimes on and sometimes off display, indoors and out, shuttled around to various places on both rims of the Canyon. The latest resting place for bronze Brighty is in a small exhibit in the sunroom of Grand Canyon Lodge on the North Rim.

Then there are the "little wild horses"—for show. Gullible audiences learned that these poor, tiny things were sketching out a living in an "inaccessible valley" of the Grand Canyon, known to Indians (of course) but now sensationally revealed to the press and public. No trails went to their valley; it took the lucky, gutsy, self-promoted efforts of an entrepreneur showman to be lowered by block and tackle over sheer walls, where, finding some 50 of the diminutive equines, he rounded up two of them for exhibition and buck-collecting. The Park Service saw through this story. Grand Canyon's superintendent encouraged, "newspapermen could render a service to the public by refusing to be a party to the miniature horse hoax."

The horses were said to be stunted by poor forage and inbreeding in their clandestine, contained grand canyon. The sun didn't shine there, either. The public ate it up, of course, though eventually the hubbub (or the horses)

Real-photo postcard, "A 'Natural-Finish' Card Made by Graycraft Card Co., Danville, Va. [stock no.] 6053". *(Author's collection)* [See also p. 113 of the present volume.]

died off. Meanwhile, Park Service fieldwork ascertained that, yes, some horses thereabouts might be stunted or malnourished, but the miniature carnival creatures were not necessarily locally sourced. They might be poorly kept Havasupai ponies or maybe bad-off Shetlands brought in from Mexico—all bought, not caught. End of trail.

Finally, to close out (or start, as the case may be) the equid history of the Grand Canyon there are the fossil and feral animals. The fossil ones offered evidence in the argument over whether some kinds of animals are modern feral canyon residents or whether they were in the past indigenous to the canyon country.

Why this argument came up was because of the noticeable feral burro populations in the Canyon. They are, indeed, the descendants of those let go by prospectors and transients, or lost by the hapless. They are in no case leftovers from Coronado's 16th century incursion into the Southwest, as is occasionally reckoned. But the question begs, are the burros occupying an ecological niche once occupied by indigenous Grand Canyon equids? If not, they are "invasive species," so categorized as though they can be grouped with other eradicable

ecological nuisances like tamarisk trees or insects. While early park administrators had viewed the "hobo burros" with concern, the four-legged intruders eventually became a problem, both environmentally and politically.

Feral burros out-compete native animals (bighorns, for example) for food resources, and their inner canyon travels scuff untidy "burro trails" hither and thither across the canyon landscape, which likewise damages resources. So, after decades of recognizing the problem, plans were devised to eliminate (kill) the burros. Hacking down a tamarisk does not raise the ire of the public, but shooting down defenseless "Brightys" . . . well that was different. And what a boistrous pulpit was occupied. Editorials, articles, and letters from a concerned citizenry rushed across the nation in magazines and newspapers and dropped into the mailboxes of Park Service administrators and politicians alike. All of a sudden, Grand Canyon was to be a no-kill sanctuary. Eventually, although some unsanctioned lethal eliminations were discovered, many burros were removed by independent animal-rights organizations, whether using helicopter slings or by improvising floating corrals on river rafts. It was a sight.

So it's not *just* the mules—the Grand Canyon mules—that are rounded up in this annotated bibliography. Their many assistants, associates, and ancestors play as well in this small and sometimes just plain fun slot in Grand Canyon's history. Climb aboard anywhere and see.

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Little Wild Horses from Grand Canyon

A real-photo postcard (Graycraft Card Co., Danville, Va. [stock no.] 6270, undated)

(author's collection)

Note the sensational wording in the sign, some of which can be filled in by intuition! "Have You Seen the Little Wild Horses from Grand Canyon!" "no larger than . . ." "by Indians in box canyon" "imprisoning" "inbreeding" "pulled from the" "where sun never shines"

CONTRARY CANYON
NOYNAC YRARTNOC

A Bibliographical Guide to the Grand Canyon's Unconventional Past

SECOND EDITION

EARLE E. SPAMER

CHAPTER 12

CONTRARY CANYON

A BIBLIOGRAPHICAL GUIDE TO THE GRAND CANYON'S UNCONVENTIONAL PAST (2ND EDITION 2025)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2025/01/Contrary-Canyon_2nd-ed.pdf (2.3 MB, 118 pp.)

INTRODUCTION

THE GRAND CANYON is of course well known around the world.[2] Indigenous Americans lived there from time immemorial. Outsiders did not arrive until 1540, and not again until 1776, but their stays were just a few days, and unlike the indigenous peoples they did not see the canyon as especially significant beyond its faraway impenetrability. It was not until 1858 that visitors came to actually study it, during an army expedition under the command of Joseph Christmas Ives; they produced its first real descriptions and illustrations. And of course, there was John Wesley Powell, who in 1869 led an expedition down the Colorado River from Wyoming to Nevada, who afterward ran another river trip in 1871–72 that ended only part way through the Grand Canyon. Afterward, he devoted several years to topographical and geological surveys in the region, mostly to the north of the chasm. Ives and Powell earn credit for placing the Grand Canyon on the global stage. Then, within a decade of Powell's exploits, curious tourists began to make their ways to see it, reaching it usually from towns along the Atlantic & Pacific Railroad. By the end of the nineteenth century, the A&P's successor, the Santa Fe Railway, effectively seized the South Rim as *the* place that tourists should visit—by rail, of course. They did; and they wrote about it.

All manner of inspired interpretations and historical notes about, or including, the Grand Canyon began to arrive in books and articles slipped into mailboxes and shelved in bookshops and libraries. But not all of them agreed with the sage findings and understandings of the majority of historians and geologists; some stories were mixed up, even made up. It is easy to be supercilious when one disagrees with what was alleged. Still, some of these unconventional productions were produced with great effort, earnestly believed by their authors. When years later such works are uncovered, they might be highlighted for mirth—sometimes they are latched onto for continued substantiation of

[2] The Grand Canyon really needs no introduction, despite there being hundreds of others [and despite the existence of the present volume!]. See Earle E. Spamer, *Grand Canyon, Colossal Mirror: the term "Grand Canyon" as used in geographical nomenclature, analogy, metaphor, and neology: with an Appendix on Colorado River nomenclature* (2nd edition, Raven's Perch Media, 2025, https://ravensperch.org).

unconventional views—but usually this is done a piece at a time. There has been no attempt to codify these works as a matter of historical study, perhaps because there is no guide, no bibliography for them.

This volume is thus the first such accounting devoted only to the exceptional or eccentric aspects of the Grand Canyon, as delivered through publications. It brings to attention the pool of books, magazine articles, and other productions that do not adhere to widespread conventions about the Grand Canyon's history and science. With the assistance of web searches, one may find a great many more resources that go much farther into detail about any of the topics listed herein; but these often unsupervised items are ephemeral, so they are overlooked here. This guide is restricted to published records, which generally guarantees that there are multiple, identical copies of a work that will be accessible, somewhere, for a long time. (A few URLs to online resources are provided as notes in some citations herein; these links were verified prior to releasing this volume.)

Contrary Canyon is divided into several chapters. "**Ancient Asian Visitors**" pertains mostly to the supposed discovery of the canyon by pre-Columbian Chinese venturers. "**The Egyptian Cave**" is noteworthy not only for its mysterious connection to ancient Egypt but for its longevity in popular media—notwithstanding the claims therewith that the Smithsonian Institution and the U.S. government both are "hiding something" under the guise of super-secrecy. While publications that pertain to "**UFOs and Alien Activities**" in the Grand Canyon are relatively few, an examination of web-based resources reveals a stunning profusion of "documentary" and speculative items that purport there are bases built by extraterrestrials beneath the canyon, and that tunnels connect them with other bases hundreds of miles away, and so forth; and these are inhabited by "Reptilians" and "Greys," and other extraterrestrials among us who are subjects unto their own across the web. "**Geology Askew**" records a variety of re-interpretive explanations for the canyon's creation and accounts for its various geological treasures: citations under "Incredulous Grand Canyons" pause momentarily on a variety of ways by which the canyon owes its existence, which include the novel "Electric Universe" theory of planetary-scale electrical discharges; there are as well "Exaggerations and

Peculiarities" enough to tease the imagination; and there was a decades-long "Platinum Rush," brought into being when the run-of-the-mill gold rush fizzled. The occasional novel is listed among the publications cited in these chapters. Even though they are by definition "made up," they each have taken inspiration from—and in some measure give further life to—the categorical subjects in which they appear herein.

Last, the predominant part of this guide, Chapters 5 and 6, is devoted to **creationism**, which swirls restively, even contentiously, through our present-day culture. No unified guide to the publications that deal with Grand Canyon creationist topics has hitherto been available. The subject is confrontational enough to separately lay out the citations for "Young-Earth Creationism" (Chapter 5), then to present (Chapter 6) those that pertain to counterpoints to young-earth creationism, to old-earth alternatives within the creationism compass, and to historical perspectives on creationism that include the Grand Canyon. Even though the canyon is featured widely, selectively, and repetitively throughout creationist publications overall, this guide does not monitor creationist points and counterpoints broadly; that is not its purpose. The focus is solely on the Grand Canyon and how it is seen by creationist authors and by those who explicate the difficulties of creationist viewpoints in contrast to long-standing, conventional, methodically substantiated science.

I am personally not an adherent of creationist perspectives of the Grand Canyon. Accordingly, I may be criticized for not providing Chapters 5 and 6 as a separate publication, that the subject of creationism should not be massed with things like UFOs. (Believers of extraterrestrials among us may see it the other way around. And most geologists may wish that I had lumped creationism with the entries for "Geology Askew.") However, I have been a bibliographer for the past half century, and professionally I was at different times over more than forty years an archivist and a manager of a wide range of research collections. I am bound to the unbiased informational purposes of historical and bibliographical reference materials, thus I have condensed into this guide all things that may be given the label "**unconventional**." So, each chapter herein cites publications that specifically are contrary to evidence, judgements, and conclusions of more widely assented forms of learning and

dissemination. This in no way means to deride adherents of any of the themes of these chapters, but provides to all interested parties the first dedicated bibliography that unambiguously documents sources for the Grand Canyon's more unconventional topics. It offers no opinions on the veracity of the statements they make because it is the user of this guide who will determine what is applicable to a task at hand. Its overall purpose is to identify published resources that can contribute to more scrupulous historiographical surveys of the Grand Canyon's unconventional past. ▪ ▪ ▪

— 1956 —

A Resource Guide to the Grand Canyon Midair Collision of Trans World Airlines Flight 2 and United Air Lines Flight 718

June 30, 1956

second edition

compiled by EARLE E. SPAMER

RAVEN'S PERCH MEDIA 2025

CHAPTER 13

— 1956 —

A RESOURCE GUIDE TO THE GRAND CANYON MIDAIR COLLISION OF TRANS WORLD AIRLINES FLIGHT 2 AND UNITED AIR LINES FLIGHT 718 JUNE 30, 1956 (2ND EDITION 2025)[1]

COMPILED BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2025/01/1956_2nd-ed.pdf (5.3 MB, 116 pp.). This publication is released in the Public Domain.

COMPILER'S PREFACE

I was nearly four years old when the Grand Canyon air tragedy took place on June 30, 1956, a continent's breadth away from my folks' Walnut Street apartment in Philadelphia. Living with us was my paternal grandfather. He was born in 1869, a generation before the advent of airplanes, yet on this day he still had never flown in one; comparatively few had, in those days. As for the events laid out here, I have no family or other familiar connections beyond that of my 50 years' passion for Grand Canyon's history as a bibliographer and chronicler, and my dealings with others who have had the great pleasure of being Canyon travelers, enthusiasts, historians, and government and concessionaire employees. It was not until I began my bibliographical work that I became aware of the events that continue to unfold from that shocking day, which was then just 18 years earlier. My only direct exposure to the crashes is having seen in 1991 a few pieces of wreckage from the United Air Lines plane, lying near the Colorado River across from the mouth of the Little Colorado River. Despite such scant specific connection to the disaster, through things cited in this guide I have shared (though weakly) the emotional despair of the families and friends of the victims, the unfathomably strenuous dangers and reactions of those who recovered remains and artifacts, and the assertiveness of administrators that moved to create the beginnings of modern air traffic control. As is all too often uttered in such circumstances, none of this should have been. Yet, we today are the receivers of beneficial things that managed to come from understanding what happened, from the productive efforts of the legions who made that good come about, and from the efforts of those who have made it possible for we as a nation to remember. The resource guide you are reading is a contribution to this history, as seen and experienced through the eyes, ears, voices, pens, lenses—and tears—of numerous people over the past 68 years. There is far more that could be here—particularly the vast national and international coverage of the accident in the papers, in numerous languages, but it will have to suffice to simply recognize the existence of that archipelago of newsprint. Much in it would be repetitive anyway, yet a diligent search could uncover local, cultural, and personal perspectives since long forgotten. In the meantime,

a hike through the resources that *are* collated here should be enough to astonish newcomers to this history. This also is a convenient summary of incidental news, reflections, and historically focused stories after the fact, for the consideration of those who already are familiar with the story. Perhaps a standout citation or two will be enough to inspire a reinvigorated look into some part of this overwhelming event and the repercussions it had around the world.

—*E.E.S.*

June 25, 2023 [rev. January 2025]

In Memory

Trans World Airlines Flight 2

Harry Harvey Allen
Tracine Elizabeth Armbruster
Thomas Edward Ashton, Jr.
Robert Vernon Beatty
Martha Ann Beck
Stephen Robert Bishop
Connie June Braughton
Esther Ellen McDaniel Braughton
Linda Kay Braughton
Forest Dean Breyfogle
Lois F. Klein Brock
Lillian Estelle Eden Carple
Lawrence Zay Chatten
Sally Ann Cressman
Chester Arnold Crewse
Helen Colleen Crewse
Beth Ellis Davis
Selma Louise Holme Davis
Robert Earl DeLonge
Almeda Inez Babb Evans
Donald Lloyd Flentie
Jack Silvetus Gandy
Virginia Elizabeth Keister Goppert
Janice Tracy Haas
Mildred Rogene Crick Hatcher
William Wallace Hatcher
Janice Mae Heiser
Harry Robinson Holman
James Joseph Jang
Wayne Gardner Jeffrey
Sidney Roland Joslin
Catherine Marie Friedrich Kennaley
Joseph James Kite
Linda JoAnn Kite
Peachie Marie Epley Kite
Sharon Marie Kite
Marie Jane Wilson Klemp
Lois Marie Funderburg Laxton
Michael Anthony Laxton
Mary Ellen Lytle
Claire Marie Schroeder Maag
Howard John Maag
John Otto Maag
Donald Keith MacBain
William Hartzell Markey, Jr.
Rosalie Maude McClenny
Alice Emma Meyer
Andrew Jackson Nasalroad
Robert Bernard Nelson
Marietta Louise Thompson Noel
Richard Curtis Noel
John Walker Payne, Jr.
Monica Jean Payne
Richard Darling Payne
Richard Michael Payne
Robert Farley Perisho
Dennis Joseph Phelan
Neal Alan Power
Edward Merrill Reaves
James Henry Ritner
David Karn Robinson
Geoffry Brian Robinson
Jeanette L. Karn Robinson
Robert Ernest Sanders
Esther Fair Sharp
Robert Frank Sontag
Gloria Kathleen Gipson Townsend
Bessie Nathanielene Whitman
Carolyn Ruth Wiley
Elizabeth May French Young

In Memory

United Air Lines Flight 718

Christopher Edward Balsat, Jr.
John Aloysius Barry, Jr.
Phyllis C. Goldstein Berman
Rosemary M. Ferry Bishop
Stephen John Bishop
Gertrude Agnes Coyne Book
Frank Chambers Caple
Milton Barry Carlton
Carol Jean Church
Frank Henry Clark
Leon David Cook, Jr.
Elizabeth Rogers Crider
Jeffrey Louis Crider
Elizabeth Frances Emery Doering
Thomas William Doyle, Jr.
Girardo Xavier Fiore
Estella Blum Fuchs
Walter Moritz Fuchs
Noel Henry Gottesman
Jack Brothers Groshans
James K. Hadfield
Lillian Ruth Hahn
Robert William Harms
Eugene Barton Hoffman
Russell Charles Huber
Francis Robert Jolie II
Donald Fredrick Kehl
Nancy Lou Kemnitz
Darenka Dee Kovack
Ted Michael Kubiniec
Ray Oliver Lasby
Sally Lou Laughlin
Joseph Martin Levis, Jr.
Theodore Henry Lyman
Carl Gotfred Matland
John Joseph Muldoon
Gerald Murchison
Dwight Bradley Nims
Floyd Arthur Nixon
Elsie A. Wettlin Osterbrock
Hugo Pekruhn
John George Reba, Jr.
Alexander Eugene Rosenblatt
Russell Alger Shields, Jr.
Robert Forbes Shirley
Margaret Ann Shoudt
Carl Jeramiah Snyder
Fred Robert Staecker
Thomas John Sulpizio
James William Tobias, Jr.
Albert Vogt
Stanley Jerome Weiss
Peter Austin Whyte II
Albert Edward Widdifield
Roberta Elaine Wilde
Donald Lee Winings
Wesslau Gilbert Wright
John Edward Yaeger

BACKGROUND

"An Overview of the Accident"

by Mike Nelson, author of *We Are Going In*, September 2018
from the Patrons of the 1956 Grand Canyon Midair Collision website
https://www.1956gcmidaircollision.com/an-overview-of-the-accident
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The Grand Canyon midair collision occurred on Saturday, June 30, 1956, at a spot in the sky one or two miles west or southwest from the confluence of the Colorado and Little Colorado rivers, at the eastern end of the canyon. Two four-engine, propeller-driven airliners, some of the biggest in the U.S.A., ran into each other at an altitude of 21,000′, at 11:30 a.m., Mountain Standard Time. They had taken off an hour and a half earlier at Los Angeles International Airport, one headed for Kansas City with 70 persons on board, and the other headed for Chicago with 58 persons on board.

As a result of the damage caused in the collision, both planes crashed in the canyon, on the west bank of the Colorado River, taking the lives of all 128 persons aboard. This was by far the greatest loss of life in an airline accident that had ever occurred, anywhere in the world, up to that time. It was also the first and only midair collision between two airliners carrying passengers that had ever happened in the U.S.A., and it involved two reputable airlines, TWA and United Air Lines, no less.

The country was stunned — this was an unthinkable disaster, confidently held to be basically impossible by almost everyone who had thought of the possibility. It seemed preposterous that two huge airliners, readily visible, could even come perilously close together in the wide open sky, without their crews spotting the other plane and taking evasive measures.

The accident happened well removed from both flights' proposed courses, about 12 miles north of TWA's and 20 miles north of United Air Lines'.

Neither proposed course passed over the canyon, but in those days sightseeing jaunts were common for flights that skirted nearby.

It is fairly certain that United Air Lines was over the canyon for just this purpose, while TWA may have been there for the same reason, or to circumnavigate the huge cloud that was blocking their proposed course.

Either way, they came around opposite sides of the massive cloud and ran into each other; and just to be completely clear, this was in the open air — neither of them flew through the cloud.

One twentieth of a second was all that separated all of those people from life. Had the TWA plane taken off 1/20th of a second sooner, or the United Air Lines plane 1/20th of a second later than it did, the planes would have just barely missed each other, and what happened that day would have been only a significant but obscure incident lost to the annals of history.

These wishful thoughts aside, in the reality that ensued the United plane lost the outer third of its left wing, and the TWA plane lost its entire tail section. The TWA plane went completely out of control and tumbled end-over-end to the earth; the United plane entered a left-turning, downward spiral and was still marginally flyable, though terribly hampered.

From the evidence later found in the wreckage, it appeared that the pilot of the United plane managed to gain a measure of improvised control, but tragically he lost it just seconds before the crash, when his own tail section came apart. Had this not happened, the United plane would have overflown the rocky promontory that it hit, and its pilot may have been able to perform a belly landing on the Colorado River.

An hour and a half later, with both flights having failed to report their positions for all that time, a Missing Aircraft Alert was issued and the United States Air Force launched a full-scale search and rescue mission. Despite their great effort, they were unable to find the wreckage that day, even though both crash sites had become infernos giving rise to great, tall columns of black smoke; apparently the overcast in the crash area hid the sites from the view of the aircraft above.

Out of all proportion to the massive search effort, the wreckage was actually discovered just before dusk that evening by a private pilot who had seen the smoke earlier in the day, around lunchtime, when he had flown tourists near the area for sightseeing. He heard a report on the radio that evening that two airliners were missing and he immediately realized what the smoke he saw midday must have been; he hurriedly flew back to the area and identified the TWA wreckage from the markings on its tail section. Nightfall was fast approaching and for his own safety he had to leave the depths of the canyon to fly home, without examining the second still-burning area a mile north, though he was sure it must be the United plane.

He called TWA's headquarters in Kansas City and reported his find, but by then it was too dark out for the air force to fly over the area and verify his information. That had to wait until the following morning at dawn, at which time the air force positively and officially identified both wrecks.

Across the nation many hundreds of families, those of the victims and their friends, had lived through the worst night of their lives, with their loved ones missing, and now, on Sunday, they received the awful word that both planes had crashed and that no survivors were expected.

One of those families was my own — my uncle, Jack Groshans, was a passenger on the United plane.

For the families and friends of the victims, the coming days were a seemingly eternal nightmare of praying for a miracle and direly fearing the worst. The families waited in excruciating alertness for the phone to ring with the dreaded call informing them that their loved one had been positively identified, and the friends waited in a parallel, persistent agony, for the correspondingly dreadful call from the families.

Only 39 of the 128 victims were positively identified — 10 from the TWA plane, and 29 from the United plane. The rest of the remains were buried in two common graves, TWA's in Flagstaff, Arizona, and United's in Grand Canyon Village, Arizona. Six of the identified TWA victims were buried along with the unidentified remains at TWA's mass gravesite, at the request of the families; all of United's 29 identified victims were sent home for burial.

TWA held a funeral service on Monday, July 9, 1956, with approximately 350 family members in attendance, and roughly 1,500 citizens of Flagstaff in solemn, reverent observance in the background. Clergymen from four faiths gave sermons. It was an overwhelming event, so much so that even the men of the military honor guard cried. 67 caskets were on display (one of which was sent home after the service) and seemed to extend forever in the three columns, stretched out in front of the congregation. At the end of the service, as the mourners passed in front of their loved ones for the last time, eight of them were overcome and collapsed; they were taken to a Red Cross tent, which had been set up in anticipation of such unendurable emotional crises.

United held a memorial service on Thursday, August 2, 1956, in front of a very large, standing headstone, and an already-closed gravesite, with the acceptance and agreement of the families. This ostensibly odd arrangement was due in part to the fact that the huge limestone marker was not yet in place by the time the unidentified remains needed to be interred. It was also due to the grievously distressing fact that there were only four caskets for the unidentified remains, even though 29 victims from the United plane were not identified. This demonstrated unequivocally that most of the unidentified victims were just plain missing, undiscovered somewhere up on the butte where the plane crashed, a fact that would have been cruelly too much to bear for most of the mourners. So the four coffins were buried before the service.

The trauma of unexpectedly losing a loved one cannot be conveyed, but only suggested. In the face of such devastating misfortune we are confronted with our powerlessness, our ignorance and our helplessness as much as with our bereavement, to such a degree that the ordeal might as well be a tortured nightmare from a reality entirely removed from the one we have known. Because it is so alien and incomprehensible, it can seem like an illusion or a netherworld, a half-world that just doesn't "add up." On the other hand, because it is so starkly terrible, it can seem like it is in nature more real than anything a person has known before. And both views are right. Either one by itself, and especially the two combined, is utterly bewildering and leaves a person defenseless against his sorrow and grief. These take on proportions beyond measure and are absolutely rending.

This was the plight of a multitude of family and dear friends of those who were lost, and it continued in phases through the succeeding years, often taking them by surprise. There's no such thing as getting over a tragedy such as this — only creating a new life and lapsing into periods of forgetfulness or times when an encouraging viewpoint takes precedence over the unanswerable pain of the loss.

Twenty years after the accident, in 1976, a massive effort was made to clean up the wreckage and most of it was removed. Nowadays, numerous small parts and fragments remain, but there is little or no sign from the river or the east rim that anything ever happened there.

See also Mike Nelson's history of the 1956 disaster, *We Are Going In: The Story of the 1956 Grand Canyon Midair Collision* (Rio Nuevo Publishers, Tucson, 2nd edition, 2017), 456 pp. [*Ed.*]

MAPPING

GRAND CANYON

A Chronological Cartobibliography

AND CHOROGRAPHICAL STUDY

Puerto de Bucareli ▪ Big Canyon ▪ Great Canyon ▪ Grand Canyon

SECOND EDITION

Earle E. Spamer

CHAPTER 14

MAPPING GRAND CANYON

A CHRONOLOGICAL CARTOBIBLIOGRAPHY AND CHOROGRAPHICAL STUDY

(2ND EDITION 2025)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2025/01/MAPPING-GRAND-CANYON_2nd-ed.pdf (15 MB, 314 pp.)

> When we speak of "The Grand Canyon" it must be understood that the Canyon does not start at the edge of the precipice. Nor is it an arbitrary line on a map, but rather it is the sum–total of the entire area surrounding those edges.
>
> — Stephen Verkamp[2]

INTRODUCTION

MAPPING GRAND CANYON focuses on maps on which the Grand Canyon is labeled by one of its four Western-derived names during the past two and a half centuries, though without particular formality or consistency.[3] The four principal sections are Puerto de Bucareli (1777–1884), Big Canyon (1853–1910), Great Canyon (1853–1879), and Grand Canyon (1868–present). (For a general introduction to the evolution of these names, see *Naming the Grand Canyon*. [4])

This compendium may ignore important interpretive and human-focused information on the maps that might be more significant to cartographical historians; for example, the revision of political geographies. Instead, most citations herein contain chorographical points that concern the physical geography of the

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[2] Stephen Verkamp, "Testimony to the Subcommittee on National Parks, Forests and Public Lands of the House Committee on Natural Resources, November 3, 2011" (originally a web resource of the U.S. House of Representatives, "www.naturalresources.house.gov/UploadedFiles/VerkampTestimony11.03.11.pdf", 4 pp., but link was no longer valid in August 2021). See instead in the published record, "Statement of Stephen Verkamp, President, Verkamp's Inc.", pp. 100-109 in *H.R. 1980, H.R. 2070, H.R. 2621, and H.R. 3155 : legislative hearing before the Subcommittee on National Parks, Forests and Public Lands of the Committee on Natural Resources, U.S. House of Representatives, One Hundred Twelfth Congress, First Session, Thursday, November 3, 2021 : Serial No. 112-81* (U.S. Government Printing Office, Washington, D.C., 2012). Verkamp testified as a long-time Grand Canyon resident and president of the family interest, Verkamp's, Inc. His grandfather was John G. Verkamp (1877–1944), a pioneer who in 1902 established an independent souvenir and curio shop in a tent at Grand Canyon. The firm that grew from it survived for more than a century before the family retired from the concessionaires' business and turned the property over to the National Park Service. The building is now a historically focused visitors' center and residence for participants in the "In Residence" artists and astronomers programs.

[3] Citations are extracted and further annotated from Earle Spamer's *Cartobibliography of the Grand Canyon and Lower Colorado River Regions in the United States and Mexico* (5th Edition, 2025, Volume 2 of THE GRAND CANON series). Overall coverage in Volume 2 is far more comprehensive since it embraces a larger geographic region and includes more illustrations of unique or scarce maps.

[4] Earle E. Spamer, *Naming the Grand Canyon* (Raven's Perch Media, 2024).

region; specifically, the Grand Canyon mapped by its various names, and its immediate surroundings. However, once maps of the 20th and 21st centuries are encountered in the chronological presentations, less focus is had on the descriptions of mapped physical features because by then the region is well mapped, correctly presented, and under one name (Grand Canyon), when this thus becomes a current cartobibliography for the canyon.

In my chorographical notes I use some specific terminology that describes the reach of the Colorado River shown on a map—usually *starting* at the Gulf of California. This is because the headwater or other upstream areas depicted between maps vary greatly; their labels may geographically deviate on generations of maps; and the inclusion or omission of tributary streams likewise varies. Thus, the head of the gulf serves as a generally fixed reference point (even where it is malformed on early plans), so the geographic order of the narrative "goes against the flow" of the river. At my discretion some descriptions follow the natural course of the river; these are clear in context, such as when the Colorado follows a cartographically imaginative course across the Grand Canyon region.

The creator credit for a map might differ significantly from the credit given by other cartographers and bibliographers because this cartobibliography generally uses the date of publication (and thus public availability) rather than an attributed date for the map's delineation.

Regarding the dates of maps, I sometimes have had to rely on the intrepretations made by library catalogers, especially when maps contain no evidence of a date on them. I only ask the user's forbearance in light of the fact that specific information is not always to be had or is open to subjective interpretation given the passage of time. In any case, as much information as possible is given here in order to identify the works and to convey information by which they can be found, should they be needed for more in-depth study or to re-cite them.

Mapping Grand Canyon is a documentary effort, describing how the Grand Canyon region of North America was portrayed on published maps, correctly or incorrectly. This is less a contribution to cartobibliography in its strictest sense, although in a few instances it does correct or amplifies the work of earlier cartobibliographers. Some chorographical notes include brief descriptions of tribu-

taries and other regional streams. One of particular note appears on numerous 19th century maps of the Southwest where there is delineated some variant or translation of the peculiarly named "River of the Sulfurous Pyramids"—for example, "Rio de las Piramides Sulfureas", "R. de los Pyramides Sulfurcas" [*sic*], "R. de Pyramides", and "R. Pyramid", even the remarkably butchered "Rio de los Panami des surfurcas" (see THE GRAND CANON Volume 2 for additional and more complete citations than are indicated in *Mapping Grand Canyon*). This is a name derived from the 18th century Spanish cartographer Bernardo de Miera de Pacheco, who had accompanied the Domínguez–Escalante Expedition of 1776. His manuscript map(s) were among those that Alexander von Humboldt relied upon when he was in Mexico in 1803, where he sketched out his magnificent map of New Spain (formally published in 1808 and 1811). The river's name is a corruption, as masterfully explained by C. Gregory Crampton, who indicated that the Virgin River had been called the Rio Sulfureo (Sulphurous River) or the Rio Sulfureo de los Piramides (Sulfurous River of the Pyramids). Humboldt miswrote it as *Rio de las Piramides Sulphureas* that thereafter was translated as the river of the sulphurous pyramids! Crampton explained:

> . . . it is clear that the word pyramid is intended to describe the mountainous towers and temples to the east of the [expedition's] trail at this point and to the north of it as they headed back toward New Mexico. This may be regarded as the first description of the intricately carved escarpments peculiar to the southern exposures of the High Plateaus of Utah which find classic expression in Zion National Park and Monument not far from the Spanish Trail of 1776.[5]

Some maps, particularly those of the first two-thirds of the 19th century, may be recognized as noteworthy for the display of frequently changed political boundaries; so one may wonder why note is not made of these in *Mapping Grand Canyon*. This cartobibliography focuses on the physical geography of the Colorado River country; the political boundaries displayed on these maps are not usually important in this context. In fact, the same base map might have been used by a publisher in order to issue a map on which only the political boundaries were revised (not the physical geography). This was only a matter of

[5] C. Gregory Crampton, "Humboldt's Utah, 1811", *Utah Historical Quarterly*, Volume 26, no. 3 (July 1958), p. 275.

convenience for the cartographer or the atelier. New discoveries about physical geography, which might have called for a more wholesale revision of a map, either were not known to the map makers and sellers or were ignored for the sake of expedient sales. The reuse of severely outdated base maps simply to present redrawn political geographies, or those that were used indiscriminately for convenience—despite a publisher's trumpeting "the most recent authorities" and so forth—needlessly unleashed floods of misrepresented geographies that carried forward past their primes. In some cases, a single atlas may include maps that overlap geographically but which display obviously different information (examples are shown in THE GRAND CANON Volume 2). The commercial map publishers should have known better, though in some cases even the government cartographers are caught in the act.

If one pays close attention, one will see the onward representation of the same, often inaccurate, geographical elements along with the arrival of new elements (incorrectly and properly displayed alike). Of course, most representations of the courses of rivers on these older maps are diagrammatic, not the results of careful surveys (which was rarely the case). Many maps anyway had been prepared to display political boundaries and spheres of influence, more so than physical geography. Some depictions of river courses are honestly conjectural, perhaps delineated with dashed lines; many, though, are simply contrived. People generally understood that these areas were effectively—if not utterly—unknown to Western eyes and minds. What were drawn onto maps, then, were simply indications that a river was known—or said—to be present there, somewhere. And so a line was drawn, its twists and turns we today are too eager to view superciliously, which were really for interpretive effect, that "here a river flows." But, for an off-corner of the world such as the southwestern part of North America, copying and plagiarizing geographic information, especially in earlier times, was not only convenient, but expedient and largely unremarked.

Mapping Grand Canyon does not describe maps from the viewpoints of human history and the development of cartography, but expresses the nature of physical features of the Grand Canyon region in temporal perspective, following the usage of Grand Canyon's variant names since the late 18th century.

Attentive users of this volume are bound to discover omissions, which are not intentional. Although a bibliographical list of maps provides a useful service, Carl I. Wheat clearly explained (specifically for his monumental work on the Transmississippi West of North America) that it is impossible, at least for one person, to pursue a perfect record of comprehensive listings:

> Books about maps, . . . or indices, or bibliocartographies, or catalogues, or even the most learned discourses on the maps of related areas cannot be accepted or used as substitutes for personal examination of the maps themselves [. . .] To those familiar with the history of this vast western area, it will be obvious that no investigator could in his lifetime hope to see and list all the maps that in some fashion bear upon its complex story. [6]

Nonetheless, I hope that these citations, confined as they are geographically, temporally, and chorographically, also inspire some users to embark on reading journeys (made ever more possible by the numbers of maps accessible online) into the realms of always-evolving studies of cartography. The old never is outdated when its materials are looked at with refreshed vision.

THROUGHOUT this cartobibliography, informational cross-listings are made to the five-volume cartobibliographical compendium of Transmississippi West maps by Carl I. Wheat that is a definitive checklist on the subject. Sometimes it may be awkward to use, given that Wheat's sequential enumeration of maps in his cartobibliographies do not follow in order within his greatly informative narrative text, but the separate, chronologically ordered "Bibliocartography" (as he called it) in each volume is more suited to that purpose. Each volume also contains numerical indices.[7]

When referring to the cross-listings to Wheat, bear in mind that he has arranged items chronologically according to the dates they were created, not necessarily the dates of publication (publication dates are usually referred to in the present cartobibliography). Sometimes, several (even many) years can

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[6] Carl I. Wheat, *Mapping the Transmississippi West, 1540-1861. Volumes 1–5* (Institute of Historical Cartography, San Francisco, 1957–1963).

[7] For a combined index to all volumes, see Seavey, Charles A. *Mapping the Transmississippi West, 1540-1861 : an index to the cartobibliography*. Winnetka, Illinois: Speculum Orbis Press, for Map and Geography Round Table, American Library Association, Map and Geography Round Table, Occasional Paper no. 3, 1992.

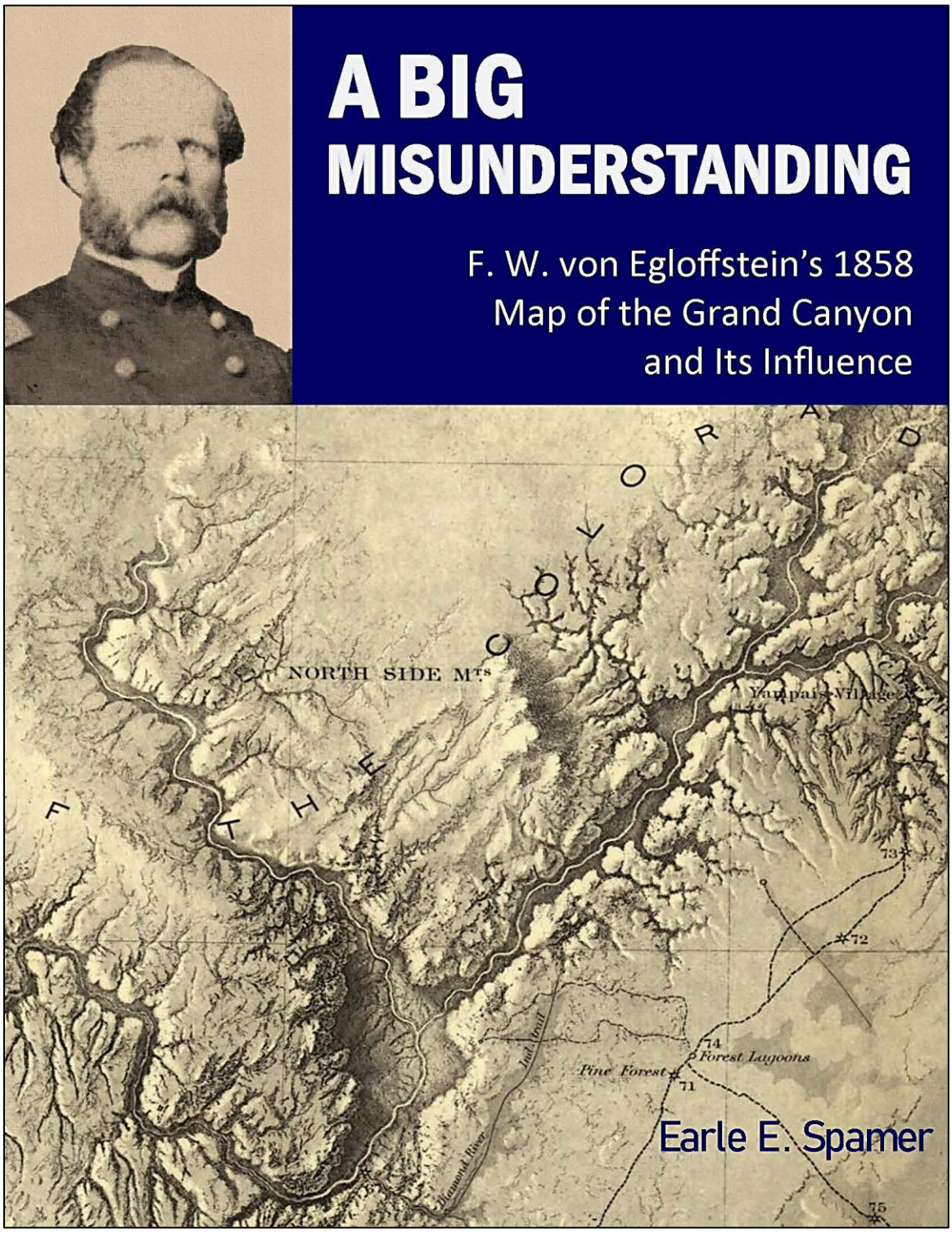
separate the dates. Herein, a modified style of citation may record differently from Wheat, particularly in the attribution of creator. The differences are imposed by Wheat, who relied (as a cartobibliographer) on the aspects of origin and historical order rather than to the aspects of publication. Further, this cartobibliography cites information as it appears in the publication, whereas some cartobibliographers, like Wheat, may cite interpreted information. Often, particularly with early maps, information is ambiguous and a bibliographer must in the end defer to interpretation. (Recall, too, that Wheat includes manuscript materials in his cartobibliography. Only a few significant manuscripts are cited in the present cartobibliography; these are specially flagged in their appropriate places, by year of creation.)

POSTSCRIPT

"Mapping Grand Canyon" Conference (Arizona State University, 2019)

This conference was held at Arizona State University February 28–March 1, 2019, organized by Matthew Toro, Director of Maps, Imagery, and Geospatial Services, ASU Hayden Library, Map and Geospatial Hub (https://lib.asu.edu/geo). There is no printed conference proceedings volume, but videos of presentations at the conference have been posted online (https://lib.asu.edu/mapping-grand-canyon-conference/program [March 2019; last accessed April 13, 2025]).

Spamer's *Mapping Grand Canyon*, independently titled, was not associated with the ASU conference.


A BIG
MISUNDERSTANDING
F. W. von Egloffstein's 1858
Map of the Grand Canyon
and Its Influence
NORTH SIDE Mts
Yampai Village
Pine Forest
Forest Lagoons
Earle E. Spamer

CHAPTER 15

A BIG MISUNDERSTANDING

F. W. von EGLOFFSTEIN'S 1858 MAP OF THE GRAND CANYON AND ITS INFLUENCE (2025)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2025/04/A-BIG-MISUNDERSTANDING_full.pdf (54 MB, 286 pp.) This highly graphic publication is best viewed in book format as opposing pages. It is not recommended for black-and-white printing.

Also available as a PDF optimized for sequential single-page viewing; rotates pages with vertically turned illustrations that take advantage of long-margin page length to horizontal orientation https://ravensperch.org/wp-content/uploads/2025/04/A-BIG-MISUNDERSTANDING_opt-single.pdf (PDF, 36MB). All text and illustrations are complete.

PREFACE

> The region explored after leaving the navigable portion of the Colorado — though, in a scientific point of view, of the highest interest, and presenting natural features whose strange sublimity is perhaps unparalleled in any part of the world — is not of much value. Most of it is uninhabitable, and a great deal of it is impassable. A brief statement could comprise the whole of what might be called the practical results of the land explorations.
>
> — J. C. Ives, *Report Upon the Colorado River of the West* (1861), p. 5

THUS ON 1 MAY 1860 Lt. Joseph Christmas Ives summed his stranger's perspective of the lands his expedition in the Southwest had surveyed two years earlier. In his letter transmitting the finished report to Capt. Andrew Atkinson Humphreys, his superior in charge of the War Department's Office of Explorations and Surveys, Ives probably believed that the expedition's efforts, and his *Report*, were the last word on travel or occupancy for the strange and supposedly inhospitable lands in the northwesternmost part of New Mexico Territory. It was to this land that he had brought the eminent topographer F. W. von Egloffstein, whose maps would document the alleged "uninhabitable" and "impassable" characteristics of the region, substantiating commander Ives' conclusions. Thus, Egloffstein's map of the greater Grand Canyon region published with the *Report* was positioned to be the definitive one for that region. What no one imagined was that his map would turn on him, leading to crazily unconvincing charts that rerouted the Colorado River this way and that—even after John Wesley Powell's first Grand Canyon river expedition accurately plotted the river's course in 1869. The map would also unfairly fall in among the same twentieth century dismissive opinions that skewered the baron's artistic abilities when he drew some improbable canyon scenes for Ives' *Report*.

A Big Misunderstanding began simply enough. Looking at "Map No. 2" once again, I wondered how an overlay of a modern map on Egloffstein's would differ. I was surprised that no such comparison had been made. This very

graphic study is the result of that one thought—a new look at his outwardly improbable "Big Cañon of the Colorado." Here are many inquisitive looks at broad areas of the map, numerous peeks at minute details (some surely not noticed before), and a few gatherings about how Egloffstein worked to make his map.

For all the respectful acknowledgment and bad press both that Baron von Egloffstein has attracted—and I admit to having been one of the disfavoring publicists at one time or another—I thought that very close examination of the map was in order. I do not disagree with the accolades he received for his method of shaded relief and engraving, a well known short-lived proprietary style though its methods to this day remain partly obscure. Instead, I investigate what Egloffstein was expressing in the physiography that he had charted, inferred, and implied. For all its fancies, he didn't do such a bad job after all but fell into the bad company of whimsical cartographers who latched on to his map. To the baron's credit, it's not often that one map can be singled out as the source for a new generation of maps, a map that made it possible to exhibit geography in a variety of new ways—even if they were awry.

By Egloffstein's proprietary process of heliography, a sculpted plaster landscape model was photographically reproduced and engraved to steel, attracting wide interest in his day. It displayed field-based and implied topographies, among which he apparently was first influenced by the geographic notions of contemporary maps. He added some of his own interpretive elements, too. The astonishing thing is that the principal features of Egloffstein's map—the stream courses in the Grand Canyon—are reasonably close to those on modern maps, with but a few deviations as shown herein. Yet the follow-up maps from other cartographers who borrowed from "Map No. 2" were, at least for the Grand Canyon region, more off than was the baron's. How could the cohort have gone so wrong? The devil is in the details.

A researcher usually prefers to work with actual articles. The appearance, physical feel, and intellectual assimilation inherent in the original lend a different perspective to a study. Once, if one could not examine an object in person, whether by a visit to a library or archive or through an opportune loan of the material in question, photography was the only recourse. Usually, that

meant a black-and-white photograph that probably would not reveal extreme detail of a large item. But details can be crucial when examining maps, thus some studies perhaps never were made, though today they can be done with relative ease. When digital reprography became possible—within the time of one generation—its advantages were immediate and improvements were made continuously. Now viewing an object in a very high resolution image is nearly the same as handling it—not to forget that many of the scarcest of maps can now be examined without travel or expense—or for that matter without risking damage to the original. It is far from the day when Arctic explorer and scholar of maps Adolf Erik Nordenskiöld observed in 1889:

> . . . even printed maps of this period [15th–16th centuries] have become very rare, and extensive collections of them are only to be found in a few libraries. Many of the most important of these documents are therefore not easily accessible to students—a difficulty the unfavorable influence of which may be traced even in elaborate geographical treatises of the most distinguished authors.

Concluding, he hoped that his detailed compilation of historical maps would "promote new discoveries in the recesses of libraries and map-collections."* What he would have thought of the internet today!

Still, the tangible aspects of a map in hand are not delivered in digital form—the subtle differences of ink and the feel of paper, parchment or vellum are lacking; or struggling with large rolled or folded sheets (those that had not the bonus of large-format flat storage). But the ability to make an object available for study widely, clearly, and usually completely satisfactorily makes up

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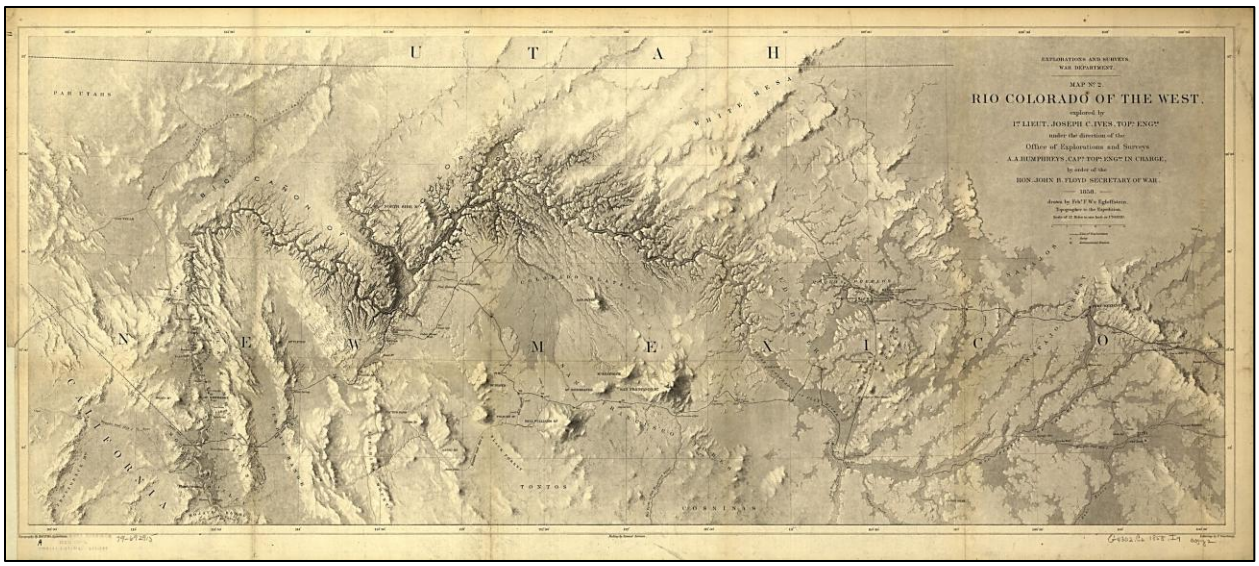
* *Quotations from* A. E. Nordenskiöld, *Facsimile-atlas of the early history of cartography with reproductions of the most important maps printed in the XV and XVI centuries. Translated from the Swedish original by Johan Adolf Eklöf, Roy. Swed. Navy and Clements R. Markham, C.B., F.R.S.* (Printed by P. A. Norstedt & Söner, Stockholm, 1889), 141 pp., 51 plates [coverage to 1550, actually]. Also a facsimile reprint (Kraus Reprint Corp., New York, 1961, 1970) and another facsimile reprint with new introduction by J. B. Post (Dover Publications, Inc., New York, 1973). [Original Swedish edition: *Facsimile-Atlas till kartografiens äldsta historia innehållande afbildningar af de rigtigaste kartor tryckta före år 1600* (Printed by P. A. Norstedt & Söner, Stockholm, 1889).]

for these shortfalls. I hope that the images in the present publication meet that standard, through which one may become a part of the map.

The imagery herein stands in for Egloffstein and the other cartographers. The rest is analytical; one may scrutinize this work to substantiate or disagree with the observations and claims made. The illustrative overlays and comparative images provide clearer explanations than does descriptive text alone, thus most chapters are designed to narrate through their successive figure legends, too. Some of the images are of perspectives not noticed before. Here I hope to defend Egloffstein's reputation, to show that as a whole his map is remarkably accurate. While it has some unbelievable features, they were not introduced as a matter of cartographical whimsy of the "here be dragons" genre. His cartography and engraving both contribute to a substantially good overview. He clearly fussed with the things that he could not see in the field, too, in order to join areas upstream and down that were better known. He also seems to have fiddled with a detail or two but for some reason abandoned the effort.

This is a born-digital production. Generous image sizes and the number of images alike allow the reader to casually examine all the points of discussion—to indeed be a part of the map. Beyond that are matters of corroboration, dispute, and reevaluation.


U T A H
N E W M E X I C O
EXPLORATIONS AND SURVEYS,
WAR DEPARTMENT.
MAP Nº 2.
RIO COLORADO OF THE WEST,
explored by
1st LIEUT. JOSEPH C. IVES, TOPL ENGRS
under the direction of the
Office of Explorations and Surveys
A.A. HUMPHREYS, CAPT TOPL ENGRS IN CHARGE,
by order of the
HON. JOHN B. FLOYD, SECRETARY OF WAR.
1858.
drawn by Dan'l Wm Egleffeton,
Topographer to the Expedition.
Scale of 12 Miles to one Inch, or 4 Miles
CALIFORNIA
TONTO
COCONINO

INTRODUCTION

PRUSSIAN BARON Friedrich Wilhelm von Egloffstein (1824–1885) accompanied the Colorado Exploring Expedition of 1857–1858 under the command of Lt. Joseph Christmas Ives, U.S. Army Corps of Topographical Engineers *(Chapter 1)*. In the first days of January 1858, at Fort Yuma, California, with many of the other expedition members he boarded the diminutive, purpose-built steamboat *Explorer* that had come upriver under the command of Lt. Ives and civilian Colorado River pilot Captain David C. Robinson—after the boat had been assembled on the Río Colorado delta in Mexico. (It had been shipped in pieces mostly by sea from Philadelphia.) Egloffstein would serve as the expedition's topographer, cartographer, and artist on the venture upstream thence overland on mules to Fort Defiance, New Mexico Territory. The land party got to the Grand Canyon twice; first on Peach Springs Wash and Diamond Creek, reaching the Colorado there, then at Cataract (Havasu) Creek where a small party, including Egloffstein, attempted but failed to reach the river again. They had also expected to occupy the confluence of the Little and main Colorados, believed to be downstream from Cataract Creek—and Ives even entertained the idea of going on to the confluence of the Green and Grand Rivers in Utah—but the landscape was uncompromising.

Egloffstein served in his topographical and artistic capacities for other western expeditions, both in the field and studio; he came onto Ives' venture with good credentials. He prepared two maps of the "Rio Colorado of the West" *(Chapter 2)*; of them, "Map No. 2" depicts—for the first time—the physiography of the entire Grand Canyon area. The technical means that he was still in the process of inventing to make these shaded relief maps has been widely acknowledged with approbation as the first example of its special form, but that is not the focus of this publication. Further, the genre of shaded relief in cartography falls into analysis in myriad philosophical and artistic studies on what constitutes "realism," usefully critical but also far beyond the scope of this publication.

This study examines the whole and details of the Grand Canyon map *(Chapter 3)*. It requires of us to appreciate the limits of visual observation that Egloffstein experienced during the land expedition *(Chapter 4)*, which necessarily requires inference on our part when analyzing the map. The study concludes with observations of possible influences on Egloffstein from the presentations on preexisting maps, and on the influences his map had on the work of later cartographers *(Chapter 5)*.

IT WILL SUFFICE to say at the outset that Egloffstein was trying to create a sense of ground truth—from high above. He explained,

> This method of representing topography is . . . truer to nature. It is an approximation to a bird's eye view, and is intelligible to every eye. [2]

Egloffstein's new method had less to do with how he surveyed in the field than with the final presentation through cartographical techniques in the studio. He was trying to create a better way to display three-dimensional relief in two dimensions; and at this his efforts were widely noticed.[3] It was a process of heliography, a general form of reproduction already known. But his method required sculpting in plaster, photography, and a novel method of screening and engraving to transfer the photograph onto a steel plate for printing. This involved a very fine etching in glass and materials handling in the studio, but the whole procedure regretfully has never been fully described. He himself had never concisely explained it, nor was any one of his shop hands privy to all the required steps.

The presentation, though, was not lost on future geographers. Three quarters of a century after Egloffstein, the U.S. Science Advisory Board affirmed, while decrying the intellectual state of American cartography in the 1930s,

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[2] Egloffstein, apparently writing on behalf of Joseph C. Ives (*Report Upon the Colorado River of the West* [Washington, 1861], Appendix D [reproduced as Figure 13 in *Chapter 2*]). While it reads that this is Ives' own explanation, the technicalities are explained in such a way that perhaps it is Egloffstein's own third-person contribution, written for Ives. It sounds like a promotional piece for Egloffstein's ongoing work toward economical heliography.

[3] See the section of the Appendix [in *A Big Misunderstanding*], "Contemporary Notices Regarding Egloffstein's Maps."

> Map making is not only a science, it is a graphic art. It has indeed a somewhat unusual opportunity in joining art and science, an opportunity that we [today] have almost missed. There was a time when the Coast and Geodetic Survey engraved marvelously plastic hachure maps of the coast and cameo-like insets of coastal details, and when similar maps were made in connection with interior explorations, as for instance by Eglofstein [*sic*] on Lieutenant Ives's Colorado River survey.[4]

Despite his creative and successful methods of cartographical expression, Egloffstein has been chided not for errors of basic fieldwork, but for having had traced the Little Colorado River well into the Grand Canyon and for presenting topographic aberrations. Essentially, this is true, but the baron deserves neither ridicule nor dismissal. In the field he did misjudge that the canyon into which Cataract Creek (Havasu Canyon) debouches was the Little Colorado, and that the great Colorado arrived to the same area somehow from the northeast. But it must be added—since other writers seem not to have broadened the charge—that this was with the unstated corroboration of Lt. Ives and the expedition's geologist, John Strong Newberry. Yet by comparing the courses of the streams that he mapped to those on modern maps we see that he actually delineated them fairly well; they are only mislabeled or not labeled.

Reproval of the map has also attended to his detailing. But, as is shown in this study, only where necessary did Egloffstein contrive—reasonably—topographical associations on the broader landscape. Such were applied creatively to establish senses of realism rather than defaulting to blank spaces or simply making things up for the sake of filling in those spaces. This was amplified by the fact that he was not engraving these features reflexively in the studio, but first he sculpted the entire scene in relief in plaster. Intuitively this is a mind's eye process; it had to make sense even if we now understand it is not wholly ground-truthed. He might have been influenced by Lt. Ives' need to present a reliable map that would have uses for military planners, a map that

[4] Carl O. Sauer, "Preliminary Report to the Land-Use Committee on Land Resource and Land Use in Relation to Public Policy," in *Report of the Science Advisory Board, July 31, 1933 to September 1, 1934* (Science Advisory Board, Washington, D.C., 1934), p. 179.

would neither present reckless misinformation nor offer useless vacant landscapes.

The misconceptions presented on the Grand Canyon map are not due to a topographer's faulty observations while on the ground; they follow an obligatory mode of analysis after the fact, *de rigueur* in contemporary cartography, with which to infer areas that are neither closely examined nor understood from distant views of the landscape. In order to connect the Colorado and Little Colorado Rivers in their known courses in other regions to the reaches that he did see at the Grand Canyon, Egloffstein had to run them through areas that might also have been meagerly, perhaps unreliably, reported by travelers (mountain men, expedition guides, and transient visitors, all of whom are likely never to have written things down). In tracing these rivers through landscapes whose topographies were unknown, they must follow invented courses that would suggest, "here a river flows." Although his Grand Canyon map displays obvious inventions and thus errors, as is shown herein the baron still assimilated these areas without large errant excursions of stream courses.

Fatefully, the location of the true confluence of the Colorado and Little Colorado Rivers remained uncorroborated by the Ives expedition, but Egloffstein had to intimate its location. His distant views across the canyon and plateau from the south side were sometimes vague, but they had to be translated to the map. Thus, somewhere in the Grand Canyon the Little Colorado, well known to the southeast, had to meet up with the Colorado that was reasonably well known much farther north even though the confluence points of this and other major streams still were unknown.[5]

He thought the Colorado came in from the northeast, a perspective perhaps gleaned from the creative interpretations of some maps that already were in existence. And so the great canyon that he and others of the expedition glimpsed obliquely from the plateau must have been the Little Colorado arriving to meet the great Colorado. It was, as we know now, actually the main

[5] Still wholly unknown also were the confluence points of the Grand and Green Rivers—where geographically began the Colorado River until the legislative renaming of the Grand in 1921—and the confluence of the San Juan River, although each of these rivers were well known in their courses farther upstream (and in the case of the Colorado, also its course downstream along the California–New Mexico Territory boundary and in Mexico).

Colorado. Cataract Creek was flowing into his "Little Colorado," a confluence that he knew was very close by though the expedition failed to reach it. Thus, it stood to reason that, since they had already stood on the bank of the great Colorado at Diamond Creek, the confluence of the two Colorados had to be between the mouths of Diamond and Cataract Creeks. Ives and Newberry seemingly concurred, instigating derisive analyses of the map in later, well-mapped, decades.

Egloffstein detected what is the Parashant Wash tributary, too, somewhat misplaced on his map but nonetheless prominent. Its expressed topography seems to have been confused by having seen it while looking over what is known today as Granite Park, downstream from the true mouth of Parashant Wash. (Perhaps his own field notes were somehow mixed up.) Some later cartographers seized on this then-unnamed tributary as the proper incoming course of the Colorado, and, unable to ignore what Egloffstein had mapped, impulsively reinterpreted his unlabeled upper Colorado[6] as a short tributary to the "Little Colorado." Other cartographers, though, continued to accept his upper Colorado course as the *de facto* Colorado and so allowed it to be that river's proper course coming in from Utah along a direct southwesterly route. Cartographic ateliers capitalized on both alternatives in new and reworked maps of the Southwest and the nation as a whole, portraying a variety of made-up courses for the Colorado and its major tributaries, and by extension providing for a variety of Grand Canyons that just were not so.[7]

No specific later criticism was made of these points, they having been normalized by a compliant nod to errant contemporary cartography. It was obvious what areas the baron had not seen. His critics (after the fact, in the twentieth century mostly) should have appreciated this before rebuking him for his Little Colorado and for imaginary topographies.

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[6] The term "upper Colorado" in the present publication refers to the implied upstream reach displayed on "Map No. 2," from the Utah boundary to the confluence with the assumed "Little Colorado River"; it does not refer to the modern identity of the Upper Colorado River Basin.

[7] A more specific, chorographical and illustrated study of the history of mapping the Colorado River is Earle E. Spamer, *The Colorado River of the West: Cartographic Styles of the 16th to 19th Centuries* (Raven's Perch Media, 2023, https://ravensperch.org/wp-content/uploads/2023/05/CRWest.pdf).

Egloffstein's map is as a whole more faithful to ground truth than some have declared. Its marvelously represented shaded topographic relief harbors reliable geography amidst imaginatively sculpted ideas for the unseen landscapes that nestled to the canyon. For example, as is shown herein, he may have modeled from other sources a vague understanding of the area now known as Lee's Ferry, where the Vermilion and Echo Cliffs converge, that had been visited by a Spanish explorational party in 1776 and (perhaps, without written record) by representatives of the roving mountain man era. He also may have been aware of intelligence from members of other explorations of his day whereby geographical observations of leaders and guides were added to expedition reports or conveyed through oral exchanges.

The dismissive opinions held by more modern map readers is with Egloffstein's Grand Canyon regional map ("Map No. 2"), not with the map that accurately plots the course, at a smaller scale, of the Colorado River that he surveyed during the upstream journey to Black Canyon ("Map No. 1"). The Grand Canyon map, which revealed the canyon's place in the world, unwittingly allowed for different solutions to the problem of the Colorado River's course coming into the area from the north.

"Map No. 2" contributed to the baron's progress toward the goal of producing a wholly new means of shaded-relief cartography. It was, however, a short-lived proprietary technique of heliography, one method that enabled the transfer of photographs to engraving plates. While Egloffstein was focused on cartography, the method had obvious ramifications for commercial reprography, too, with which his New York firms were also engaged. His private method, the processes of which have never been completely discovered, nonetheless was soon displaced by more economical, though in some ways less precise, photolithography. He did not envision that this carefully crafted map would be deconstructed to invent other cartographical landscapes.

In studying "Map No. 2," a number of things become apparent. The modern stream courses, when superposed on Egloffstein's map, reveal that his overall delineation of the major streams and tributaries was remarkably accurate. There are deviations from his courses, but they are not geographically expansive nor do they wander far away before returning to satisfactory

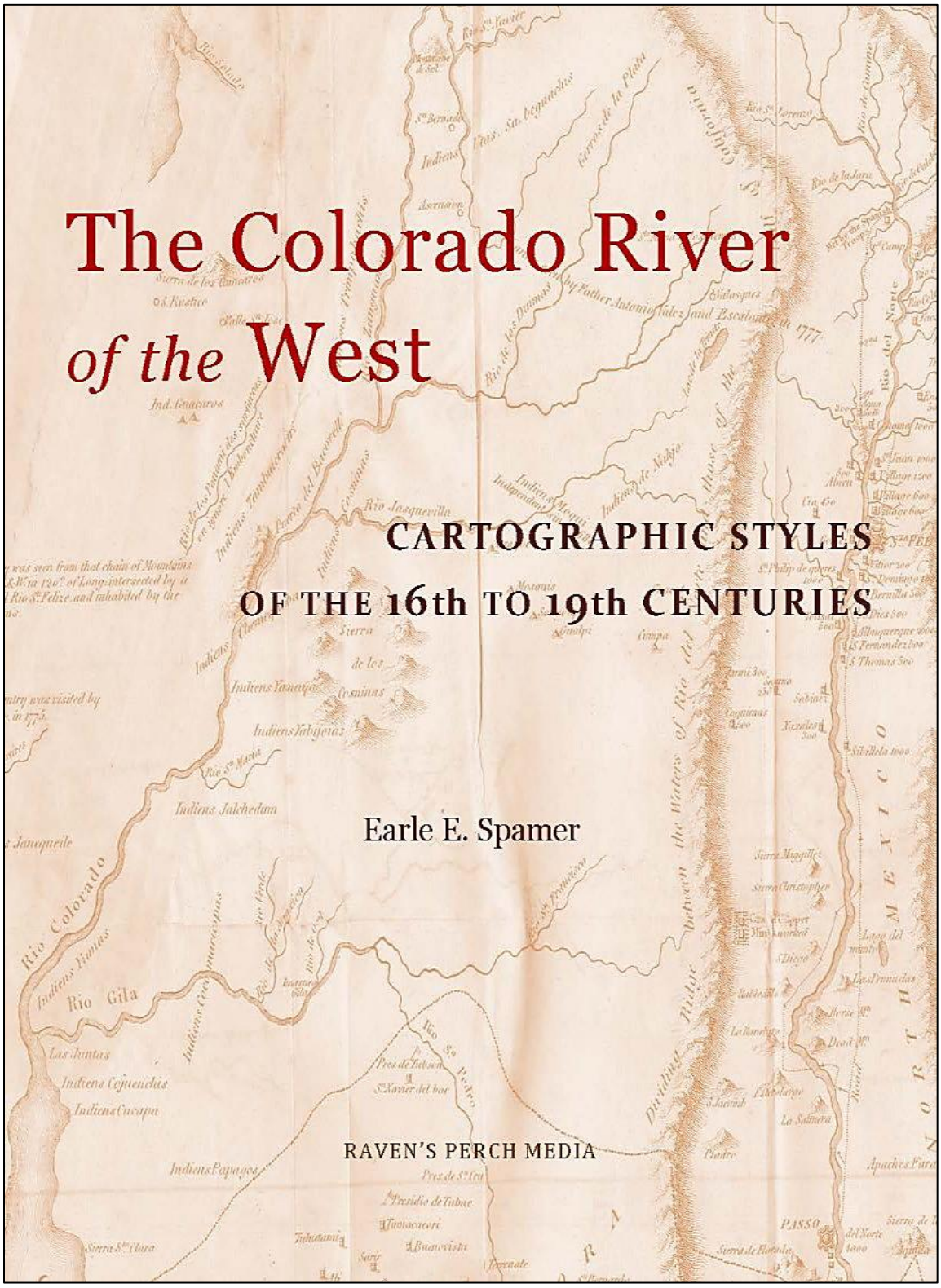
correlation. Only in the eastern and westernmost Grand Canyon is the disparate mapping of stream courses significant, and his generalized and largely formless landscape north of the canyon is inferred or supported by received information that was not especially dependable. The reasons for these fillings-in are understandable, as is advocated herein.

On close examination of map details, the arrangement of smaller tributary streams is mostly conceptual, not actually surveyed; collectively they provide only the idea of the regularity of tributaries to the main streams. The placement of these abstract streams was to represent the frequency of small tributaries met with on the expedition's traverse across the plateau. This device is effectively the same as are the presentations on older and contemporary maps of Egloffstein's time that display river courses with invented meanderings, which never could have been surveyed because no one had been on the ground to do so; they only provide ideas, suggestions that in those areas "a river flows here." On Egloffstein's Grand Canyon map, the methodology of abstract river courses is restricted to the eastern and western sections of the canyon.

The main focus of this study is on "Map No. 2," which embraces the region along the northern tier of New Mexico Territory spanning the area just west of the Colorado River to just east of Fort Defiance (on the present-day Arizona–New Mexico boundary) and from the Utah boundary on the north to the area south of the San Francisco Peaks and the confluence of the Puerco and Little Colorado Rivers. It locates and attempts to explain variances and minor features that appear on the map, accompanied by documentary evidence from the publications produced about the Ives expedition. Detailed views also help to illustrate specific activities and events of the land expedition.

The most prominent shortcomings of the baron's Grand Canyon map have been commented upon over the decades, but the map seems also to have been swept up in, if not swept aside by, judicious and capricious reviews alike of the starkly drawn landscape views he drew for Ives' *Report*. The aberrant scenic pictures can be explained as being a characteristic contemporary art style, but despite its peculiarities the map does not come under that demesne. It is a work of art in and of itself and is technically masterful even upon the very

closest of observations. In depicting the greater Grand Canyon landscape from the "bird's eye view," it is remarkably accurate, imprecise only in some respects, integrating an artist's judgmental discrimination to complete the view where ground visits were not possible. It seems unfair that Egloffstein should be depreciated for his artistic sculpturing of the map. After all, he had much experience in the field on other expeditions, drawing topography and scenery alike across mountains, canyons, and plains, and years of interpretive engraving and reproduction work in the studio to present those findings. He did not come to the Grand Canyon lacking experience; he knew what he was doing—but, like many of Grand Canyon's artists have experienced, he might have been intimidated by the subject in front of him.


The Colorado River
of the West
CARTOGRAPHIC STYLES
OF THE 16th TO 19th CENTURIES
Earle E. Spamer
RAVEN'S PERCH MEDIA

CHAPTER 16

THE COLORADO RIVER OF THE WEST

CARTOGRAPHIC STYLES OF THE 16TH TO 19TH CENTURIES (2023)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2023/05/CRWest.pdf (25 MB, 208 pp.)

PAUSE FOR A MOMENT

EVERYONE WHO HAS had the privilege of running the Colorado River knows "where it is." That was not always the case. For years—centuries, actually—the Colorado (by whatever name it had at a given time) ran all over the place. At first, its course was simple—straight to the sea, just like that. Later, the ingenuity of cartographers, using good, awful, and "inspired" data alike, kinked, curved, and waggled the Colorado across the landscape that is the southwestern part of North America. While their maps concentrated more on political boundaries, the locations of cities and towns, and the broad generalizations of mountains, seas and straits — done really well, or roughly portrayed, or sometimes made up, based on the "best" information of the day, or levitated straight from the works of other mapmakers so as to make some headway and a few dollars, crowns, or Louis — the tightly confined Colorado River went this way and that, picking up along the way a variety of tributary rivers and creeks (or sometimes not). It was not much of a learning process, but willy-nilly. One had to wait for boots on the ground and oars in the water to create a sensible Colorado River.

All of this comes to light when one pauses long enough to look carefully for the intricate details of a map, not the gross features that its title may advertise. Taking the time is the key. This seems to be harder to do in this day and age of web-based and social media offerings delivered like they are on little silver platters, that are swept away in an instant, and on to something else. (It will have to suffice that I not "credit" anything in particular for this observation, especially in a footnote that would just randomly cite one or two of a profusion of web pages. Instead, search online the phrase, "people aren't wearing enough hats.")

Take time to closely examine the map details presented here. The Colorado River voices its history loudly, but mumbles a lot. So, at the end of an enjoyably focused time perusing and discovering the intriguing, often head-scratching, details within this little selection of maps (perhaps hunting for more information along the way), pause for a moment to tip your hat to the legions of cartographers, ateliers, and modern-day librarians and digitizers who made this survey possible.

INTRODUCTION

THIS IS A cartobibliographical primer on drawing the Colorado River during the sixteenth to nineteenth centuries. It contrasts contemporary understandings of geographical relationships with current knowledge. The examples here focus on the river; how its course, tributaries, and outlet to the sea were depicted over time. In some later cases a finer focus is had on the Grand Canyon region.

Eight basic styles are identified here that describe how the Colorado River's course was drawn across the North American Southwest, and how its mouth was depicted where the river meets the sea. For each particular style, the maps presented here are chosen from among many similar ones, without particular regard to the absolute range of years of production or publication for a given style, since maps were reused or reprinted for years without improvements to the physical geography portrayed on them. Further, it is not the purpose of this survey to produce a historiographical accounting of these styles. This volume utilizes illustrations that focus only on the Colorado River region, from maps which otherwise encompass far broader geographies. Users even of these detailed views will surely take note of interesting points or displays that are otherwise not relevant to this survey, which always is one of the pleasures of perusing maps. Although only cropped quadrangles are usually presented, the maps are fully cited from the much more comprehensive *Cartobibliography of the Grand Canyon and Lower Colorado River Regions in the United States and Mexico*.[2]

The selected maps do not imply they are the "first" or "last" among such examples; they have been picked for clarity or special note. They do, however, help bracket the times when various styles were in vogue, and it is for this reason that within each style the examples are given in chronological order by dates of publication, which nonetheless does not represent a progression in

[2] Although that cartobibliography is still chorographically focused, it accounts for a much larger set of maps, complete with pertinent chorograpical notes (Earle E. Spamer, *Cartobibliography of the Grand Canyon and Lower Colorado River Regions in the United States and Mexico*, Raven's Perch Media, https://ravensperch.org). [The third edition (2025) is currently available.]

geographical knowledge. In fact, recopying maps could be a slipshod affair, such as with careless identifications and placement of specific geographic localities, like towns. This aspect is not particuarly of interest in this survey, though comparative studies of maps that do look at these placements are of great interest to historians and cartographical scholars. Such forms of erroneous presentations were partly due to the fact that printing blocks and plates were shared, inherited, and otherwise reused in various fashions, often copied, sometimes plagiarized; many with modifications, supported and baseless alike. In more recent times, in the nineteenth century notably, we sense the angst of ateliers who, to make a living, regularly turned out new maps and charts that posed as new, often barely revised if only to change the date. Sometimes there were multiple editions during a year that may have meant to keep up with rapidly revised political boundaries and civil concerns. Physical geography often fell to the wayside, with some maps relying on outdated bases on which newer boundaries and other data were printed.

For the most part, the area we know as the lower Colorado River region was rarely one of cartographic arbitration except occasionally for international boundaries (when they were of any particular concern). Rather, the depiction of physical geography was seemingly an autonomous reflex—an acceptance of the status quo when it was easier to re-use available plates or to simply copy from others, right or wrong, for an area of the world of relatively little interest. Sometimes this was in the extreme, such as when a plate was exactly reused, or with only a minor emendation to title, date, or imprint, even decades after its creation, ignoring geographical corrections made by other cartographers during that time. Such convenience for the cartographer or the atelier sometimes ignored recent discoveries that should have called for a change in how the physical geography of the area was shown, particularly in the courses of rivers (and for a while even whether California was an island and hence the Gulf of California truly a gulf or a strait). Physical geography often was ignored in favor of promoting the ideas of new political information. Revising river courses and mountains was more labor intensive and required more academic attention. Despite a publisher's trumpeting "the most recent authorities" and so forth, the reuse of severely outdated base maps simply to present redrawn

political boundaries, or those that were used indiscriminately for the purposes of assembling atlases for common use, needlessly unleashed floods of misrepresented geographies that were carried forward past their primes. The profit-focused commercial map publishers should have known better, though in some cases even the government cartographers are caught in the act.

The contrast between styles of portraying the course of the Colorado River is the objective here. Maps with minor variants have been overlooked because the overall style is the same; among them minor differences in river courses, labels, and so on are the norm and do not make the style jump to another type. Cartographical historians and collectors track variant states of maps, too, but such states are not especially of interest here except where major differences in style are seen. The widely different styles that do appear on these maps are sufficient to illuminate the breadth of cartographical imaginations and geographical hearsay. In some cases, particularly among the maps that are small-scale or ornamentally condensed, they were meant to be diagrammatic rather than geographically precise (especially if such precision was not to be had anyway). The fact that specific courses of the Colorado (and its tributaries) are shown fancifully regardless of their cardinal vectors, never implies that the reaches were surveyed; the jittery details and wanderings usually express only the conceptual "idea" of river meanders and course changes while passing through a given region, especially those that had not been, or were only cursorily, explored. What is of primary importance in this survey are the gross styles of portraying the Colorado's course.

Scholarly studies of—and critical judgments about—the usefulness and impact of the kinds of cartographical projections used over time are worthwile readings, too, even among their bewildering hundreds. But, this survey, holding only a chorographical focus on the Colorado River and its Grand Canyon, does not address these aspects, the same as it does not speak to the historiographical significance that a map may hold among scholars. Such a pedestrian focus on the chorography of the Colorado River admittedly overlooks the many fascinating, often remarkable, physiographic, political, and historical elements portrayed on or implied by these maps, and for which they are much better known. *The Colorado River of the West* instead is a contributory

study, for aficionados of the river and its grand canyons, which may be useful in a more general fashion to cartographical historians of the Southwest.

Regarding access to the maps cited and illustrated here, while I have seen many of them in person, substantially more were visited through high-resolution digitized copies online, as a part of years of continuing research on the *Cartobibliography of the Grand Canyon and Lower Colorado River Regions*. The images reproduced here are from my research files, a large number of which were accessed through the Library of Congress. Scholarly libraries comprise the chief part of the balance, of which perhaps the most widely known is the David Rumsey Historical Map Collection,[3] although libraries around the world were accessed. Also, some auction houses maintain online collections of past offerings, which is a helpful kind of resource because particular notes about variant states or other commentary might be offered, which comprises information that is not always a part of an academic library's metadata or informational webpages. In many cases, more than one copy of a map has been digitized, by different parties, and a researcher thus has the ability to switch between them if resolutions or imperfections require it.

Sometimes, miscataloging or other misinformation leads us astray; and not all of the digitized maps are in adequate resolutions for finely detailed study, which may be a hindrance. Though the modern digital environment has made detailed map inspection incredibly more easy, we nonetheless are, pointedly, at the mercy of those who choose which maps to digitize, and to the creators of websites. That such vast digital libraries of the public domain are available, though, has made possible analytical research projects like this one in ways that could not have been imagined even a few decades ago. Most images in this volume are small details captured from images of much larger maps. They have been altered digitally in order to make the details clearer, procedures that in the pre-digital age required special photography or auxiliary drawings to bring attention to special features.

[3] Library of Congress map collection online, https://www.loc.gov/maps/. David Rumsey Map Center, Stanford University Library (https://www.davidrumsey.com/; https://library.stanford.edu/rumsey).

Once, in order to examine maps that were not in one's own library, travel to far-flung places was necessary in order to see maps that were of particular interest. It is astonishing that now so many important maps can be viewed online, in places around the world. We are beneficiaries of institutions and governments that have digitized maps and make them so widely available. We may wondrously take heed and solace in the remarks made by Adolf Erik Nordenskiöld in 1889: "... even printed maps of this period [15th–16th centuries] have become very rare, and extensive collections of them are only to be found in a few libraries. Many of the most important of these documents are therefore not easily accessible to students—a difficulty the unfavorable influence of which may be traced even in elaborate geographical treatises of the most distinguished authors."[4] Concluding, Nordenskiöld hoped that his work would "promote new discoveries in the recesses of libraries and map-collections." What he would have thought of the world wide web!

See the following pages for comparisons

[4] A. E. Nordenskiöld, *Facsimile-atlas of the early history of cartography with reproductions of the most important maps printed in the XV and XVI centuries. Translated from the Swedish original by Johan Adolf Eklöf, Roy. Swed. Navy and Clements R. Markham, C.B., F.R.S.* (Printed by P. A. Norstedt & Söner, Stockholm, 1889), 141 pp., 51 plates. [coverage to 1550, actually]. Also a facsimile reprint 1961, 1970, Kraus Reprint Corp., New York. Also a facsimile reprint, with new introduction by J. B. Post (Dover Publications, Inc., New York, 1973). Original Swedish edition: *Facsimile-Atlas till kartografiens äldsta historia innehållande afbildningar af de rigtigaste kartor tryckta före år 1600* (Printed by P. A. Norstedt & Söner, Stockholm, 1889).

BASIC COLORADO RIVER COURSE STYLES—COMPARED

The following pages highlight a few examples from among the maps exhibited in the eight principal sections of this volume (see the "Examples" section). They graphically contrast the various cartographic styles drawn for the courses of Colorado River and some of its tributaries. The differences might not be as understandable when the sets of maps are examined separately.

Line styles, colors, and their word descriptions have been selected such that they may also be differentiated in a black-and-white copy of these pages. Base maps in this section have been changed to grayscale—a few with modifications to brightness and contrast—to allow the superimposed lines to be more easily seen in both color and black-and-white.

The user is reminded that the identifications of the rivers on these comparisons are modern, but that the illustrated geographical relationships of the Colorado and its tributaries are as they were interpreted, inferred, or fabricated by the original cartographers. Many of the waterways, as shown on the referred maps in the eight principal sections of the present volume, are labeled on those maps with a variety of contemporary names; these all are identified in the chorographical notes that accompany the illustrated map details throughout the eight sections.

(Digital reproductions of pp. 21–29 of The Colorado River of the West*.)*

Style 1. Insular California

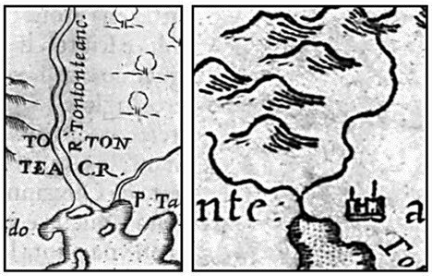
Parallel dashed vermilion lines delineate the strait labeled "Mar Vermeio."

Solid red line = Colorado River (which enters an unlabeled embayment).

Style 2. Peninsular California Displaying Variant Heads of the Gulf of California

All of these examples are from Section 2 of the present volume. They do not represent a progression in geographical knowledge.

1581



1599

1600

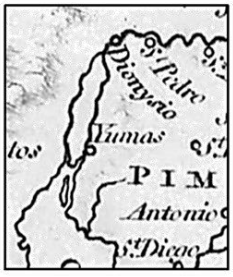
1646

1755

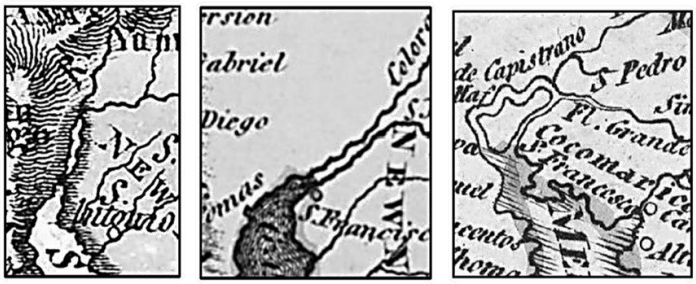
1793

1804

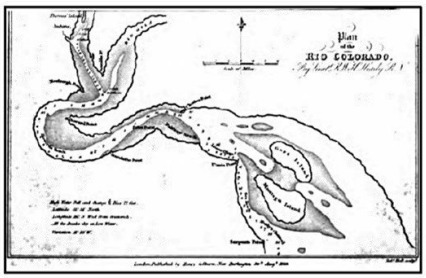
1806



1808



1818



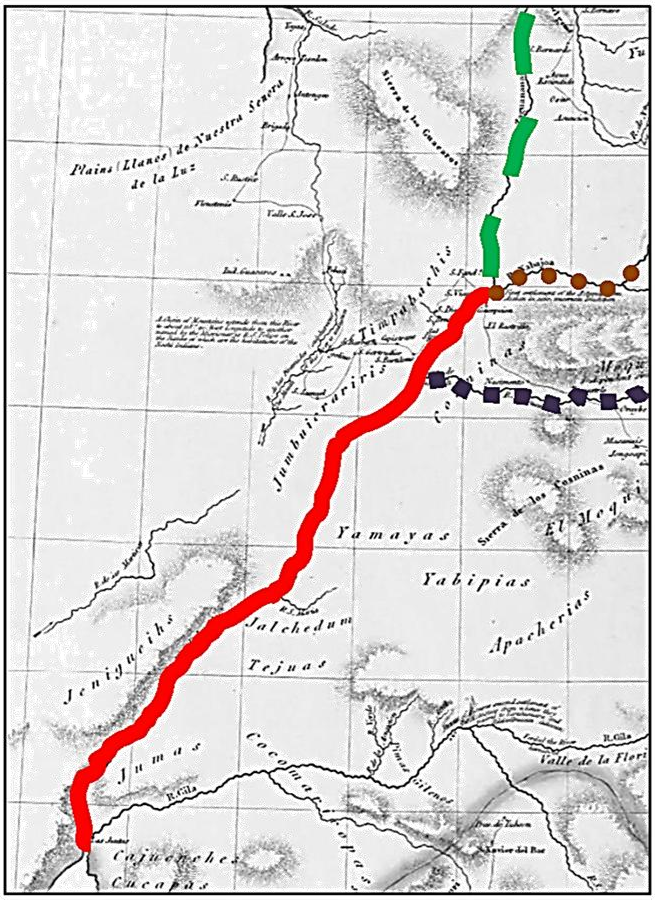
1829

1844

1851

1856

Style 3 is omitted here because the Colorado River is absent, despite other rivers being shown.



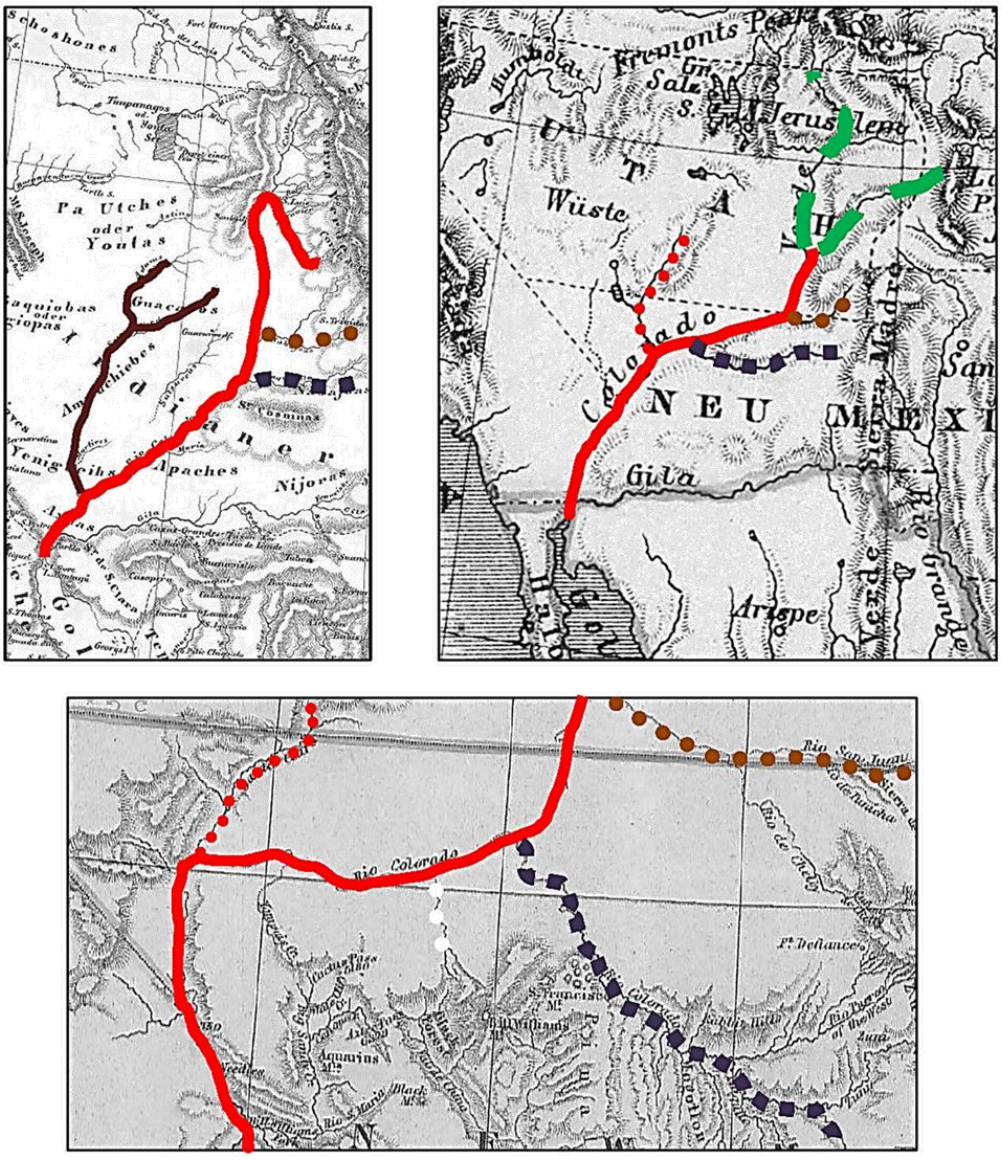
Style 4. Linear Colorado River

Solid red line = Colorado River.

Long–dashed green line = Green River.

Dotted deep orange line = San Juan River.

Short–dashed dark purple line = Little Colorado River.



Style 5. Modified Linear Colorado River

Solid red line = Colorado River (in the **upper-left figure** it is labeled "Rio Colorado" on both the lower and headwater courses [see Fig. 5.2]).

Narrow solid deep red lines (in **upper-left figure**) = a peculiar confusion between, and misalignment of, "Adams" and "Seeds Keeder" rivers (*i.e.*, Virgin and Green Rivers) (see Fig. 5.2). Some variants of this form of map also seem to incorporate elements of the Egloffstein model (Style 6); see the later maps within Section 5 herein.

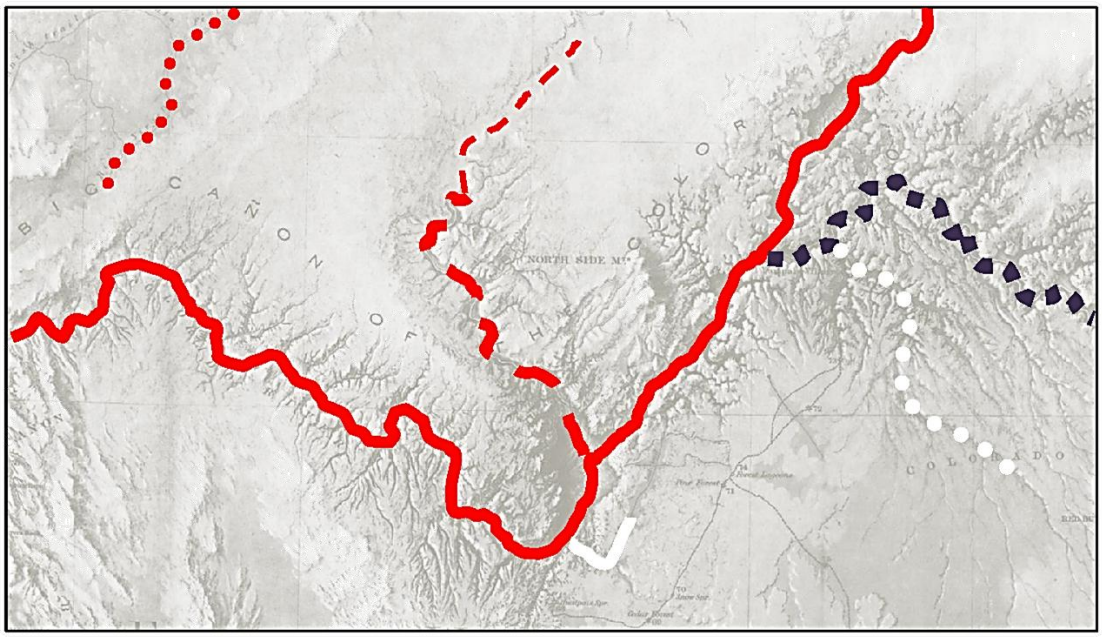
Long-dashed green lines = Green and Grand Rivers.

Large-dotted deep orange line = San Juan River.

Short-dashed dark purple line = Little Colorado River.

Large-dotted white line = Cataract Creek.

Small-dotted red line = Virgin River.



Style 6. Egloffstein Model (Original)

(see facing page for examples of variants)

Solid red line = Colorado River.

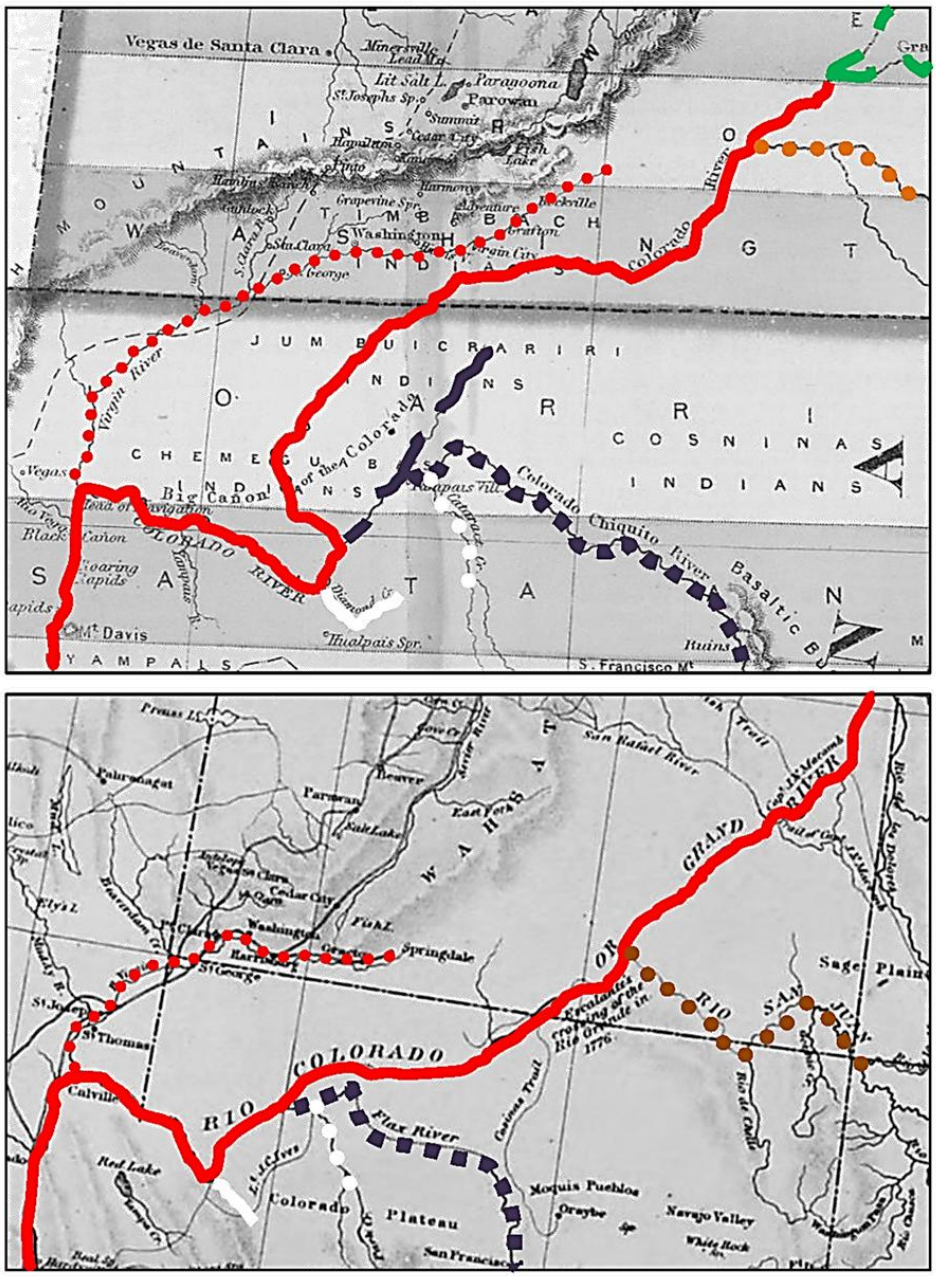
Long–dashed red line = Parashant Canyon tributary, on some Egloffstein map variants implied to be the course of the Colorado River *(see facing page)*, omitted or modified on others. (The dashed line is made narrower where Egloffstein's projected course seems conjectural.)

Short–dashed dark purple line = Little Colorado River.

Large–dotted white line = Cataract Creek.

Solid white line = Diamond Creek.

Small–dotted red line = Virgin River. (The confluence area was not interpreted by Egloffstein.)


Vegas de Santa Clara
Virgin River
Big Cañon
COLORADO RIVER
Black Cañon
Roaring Rapids
Mt Davis
Diamond C.
Thialpais Spr.
Colorado Chiquito
Basaltic
Ruins
S. Francisco Mt
Cataract C.
Grapevine Spr.
Adventure
Washington
Harmony
Pinto
Fish Lake
Summit
Cedar City
Paragoona
Parowan
Lit Salt L.
St Josephs Spr.
Hamilton's
Grafton
Virgin City
St George
Sta Clara
Cottonwood
Mountain Meadows
Hamblin
Pinto
Kanab
Colorado River
Vegas
Moapas Fill
Beaver
East Fork
Salt Lake
Parowan
Cedar City
Fish L.
Springdale
Harrisburg
St George
St Thomas
Calville
Red Lake
Flax River
Colorado Plateau
Moquis Pueblos
Oraybe
Navajo Valley
White Rock
San Francisco
Sage Plain
Rio de Cobla
Cosninas Trail
Spanish Trail
Fremont's crossing of the Rio Grande in 1776
Sevier River
Sevier Lake
Sevier Desert
Sevier Lake
Sevier River
Sevier Desert
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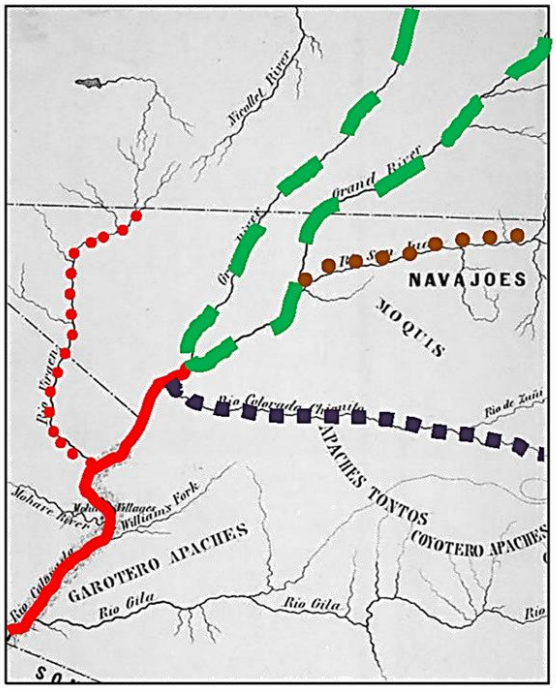
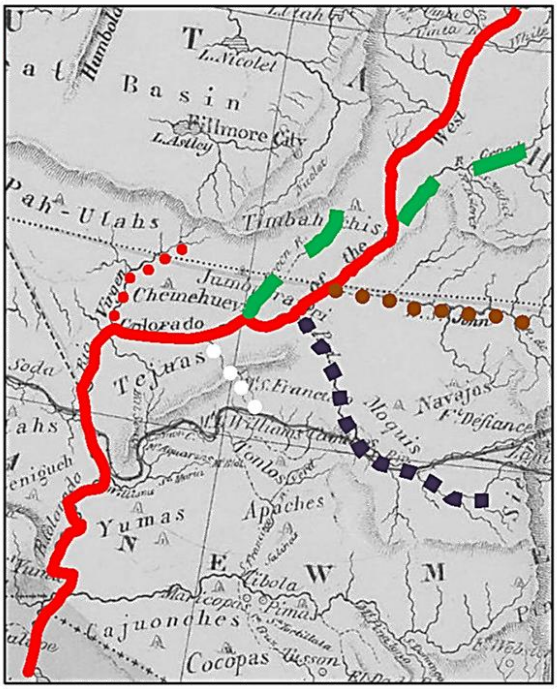
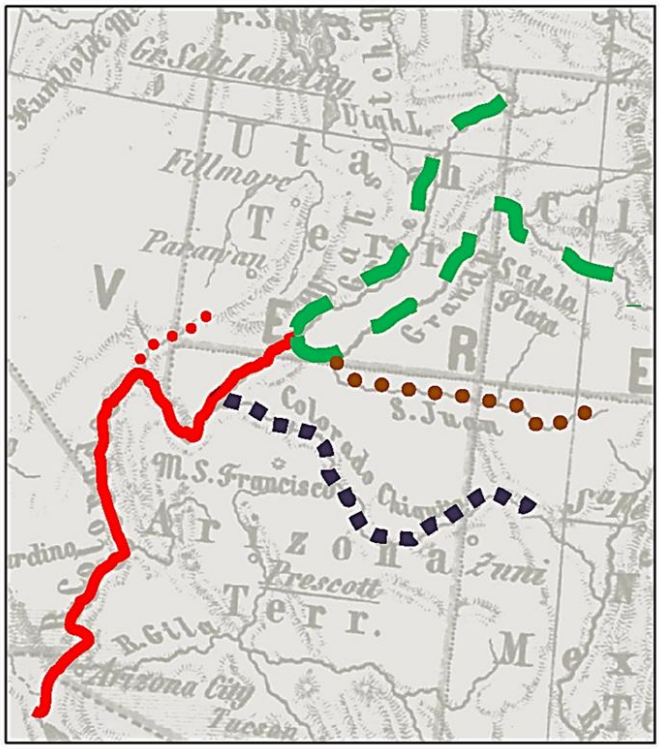
Sevier River
Sevier Desert
Sevier Lake
Sevier River







Style 7. Parallel Green and Grand Rivers as Colorado Tributaries

Solid red line = Colorado River. (Some maps seem to employ elements of the Egloffstein model [Style 6].)

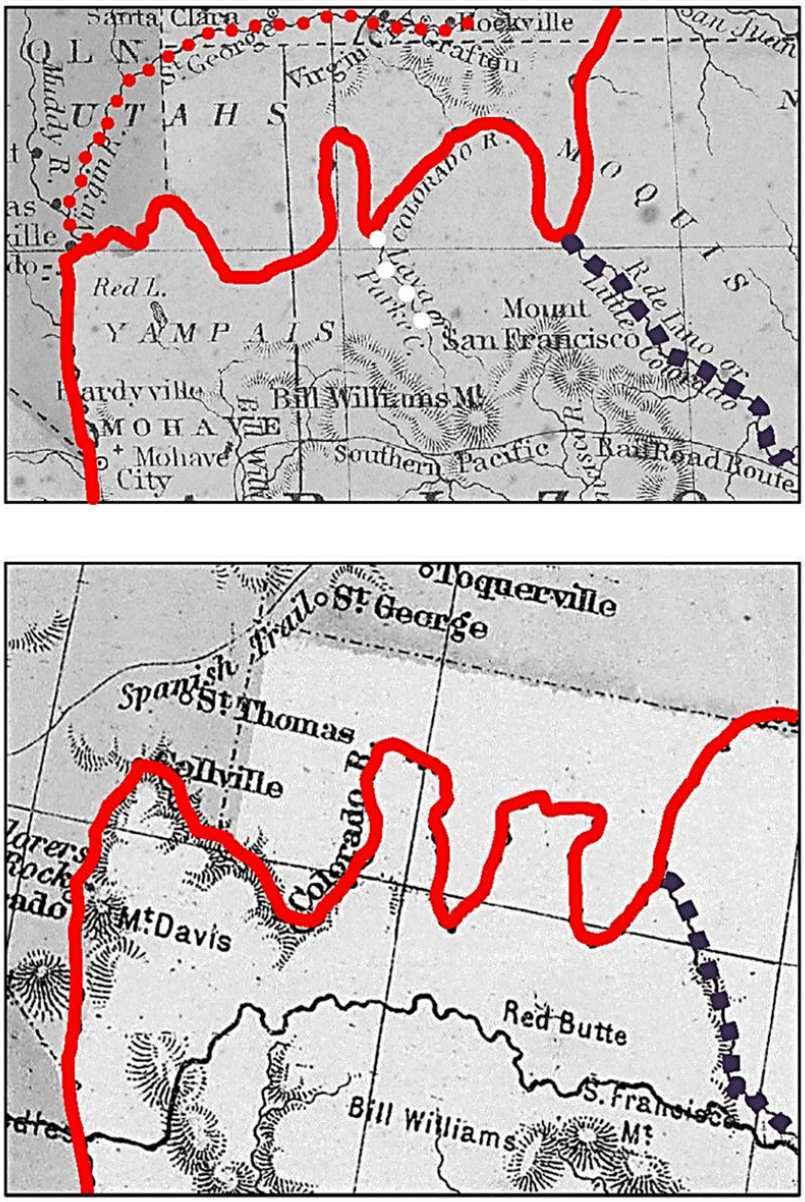
Long-dashed green lines = Green and Grand Rivers.

Large-dotted deep orange line = San Juan River.

Short-dashed dark purple line = Little Colorado River.

Large-dotted white line = Cataract Creek.

Small-dotted red line = Virgin River.



Style 8. The Colorado's Bactrian Course in the Grand Canyon

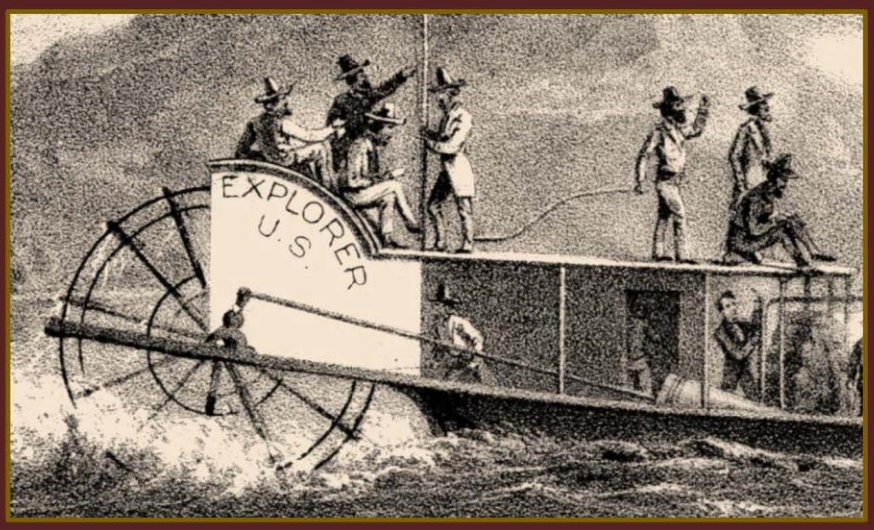
Solid red line = Colorado River.

Short–dashed dark purple line = Little Colorado River.

Large–dotted white line = Cataract Creek.

Small–dotted red line = Virgin River.

EXPLORER



Andrew J. Carroll on the Colorado River 1857–1858

Earle E. Spamer

CHAPTER 17

EXPLORER

ANDREW J. CARROLL ON THE COLORADO RIVER 1857–1858 (2022)[1]

including

transcriptions from the "General Report" of Lt. Joseph C. Ives' Report Upon the Colorado River of the West *(1861)*

translations from Balduin Möllhausen's Reisen in die Felsengebirge Nord-Amerikas bis zum Hoch-Plateau von Neu-Mexico *(1861)*

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2022/11/EXPLORER.pdf (9 MB, 108 pp.)

PREFACE

THE STORY OF Lieutenant Joseph C. Ives' expedition up the Colorado River in 1857–1858 with the steamboat *Explorer* is well known, well told, and, well, old news. What this book brings to light, however, is Andrew Carroll. He was the engineer who ran the boat's engine; he also put its parts together in an improvised dry dock dug into the clay of the Colorado River delta, and he may well have helped build the thing in Philadelphia. Ives had occasional things to say about Carroll in his "General Report," the first part of the 1861 government publication about the expedition. So did fellow voyager Balduin Möllhausen, who wrote his own book about the expedition, in German and published commercially in Leipzig, also in 1861, which has been largely hidden from readers of English. Their sparse remarks about Carroll are dispersed within long texts, and although lots of things have been written about *Explorer*'s expedition, the engineer has been ignored, save once in a while for his name, who until now did not even have a given name to go along with his surname. He was sketched by Möllhausen, and those little pencil drawings, still owned by family members in Germany, were fortuitously included in a 1995 book about Möllhausen's artwork from the Colorado River expedition. So while we have an idea of what Carroll looked like, we have lacked a united story about him.

This book does not presume to retell the Ives expedition, so meticulously told by Ives and Möllhausen and recast by historians, professional and avocational alike. It is instead a *précis* of Carroll's perspective of things; a story never gathered. On the Colorado, we rely wholly on Ives and Möllhausen since Carroll never wrote about his adventures. His prescribed, foreshortened existence in print, as "Mr. Carroll," was a reflection of contemporary politeness and Ives' military style of address by surname only (though once he freed up Carroll's initials—"A. J."). Möllhausen followed suit; throughout his book he refers to and misspells the man only as "Mr. Carrol." Ives kept to the factual details of duty in writing about Carroll. Möllhausen wrote more personably and at greater length, but his rendition has never come down to us in English, except for excerpts, and those were not about the engineer. It's a shame, because Carroll's Colorado River story is a remarkable one, brief as it is. Here

was a young man, an Irish immigrant in his mid-twenties, sent with a boat kit from Philadelphia to the mudflats of the Colorado River delta (by way of Cuba, Panama, and California ports), where he had to get the sea-weathered pieces into shape (literally), put the kit together with its three-ton boiler and engine running, and then handle its controls under the orders of the hired captain—orders that changed frequently because of the fickleness of the untamed Colorado's currents, shallow bottom, and obstructions. For a man used to Philadelphia's gently tidal, unrocky Delaware River, this was something altogether different. Carroll, according to Ives, thought the Colorado was "the queerest river to run a steamboat upon."

Except by luck, the engineer might have been put suddenly out of work on the far frontier when *Explorer* crashed headlong into a submerged rock in Black Canyon, not far from where today Hoover Dam blocks the river. No one had seen it, but the christened "Explorers Rock" defined the practical extent of navigability on the Colorado River at low water; a label that then appeared on maps for decades. By good fortune, the iron boat had held together. Its apparatus, though, was damaged when the shock wrenched the engine and boiler out of place. This took Carroll several days to repair, but *Explorer* was run safely back down the river.

Without his expertise the expedition could not have continued with its planned landward venture that took Ives and part of his command to the Grand Canyon. So even though Carroll never got to see the canyon, he made it possible for the first exploratory expedition to reach it—and more importantly, to publicize it through word and art. True, others would have gotten to the canyon, eventually, but Carroll served as a shipwright and engineer and followed the hails of the pilot above his head. He delivered in one piece to their embarkation point at Beale's Crossing the international group of Lt. Ives, Dr. Newberry, Herren Möllhausen and Egloffstein, and the soldiers of the land expedition.

Specifically to place *Explorer* and its engineer in the light of historical acknowledgment, both Ives' and Möllhausen's writings are here specially brought together for the first time. My own contribution has been to learn about the man and the firm that made *Explorer*. This book celebrates Andrew

J. Carroll and his new-found part in the history of the Southwest and of Philadelphia.

INTRODUCTION

COLORADO RIVER historians and aficionados are familiar with *Explorer*, the little U.S. Army steamboat that ventured upriver from Fort Yuma in 1858 under the command of Lieutenant Joseph Christmas Ives, Army Corps of Engineers. Ives' official report of the expedition is composed of engaging narratives and delightful scenic, ethnographic, and scientific lithographs and maps. They take the reader from the order for construction of *Explorer* in Philadelphia through the boat's tedious reassembly at the mouth of the Colorado and its upriver run, pausing at Fort Yuma to collect men and supplies, then finishes with the explorers' overland journey across New Mexico Territory to the Grand Canyon, the Hopi mesas, and Fort Defiance.[2] Accompanying Ives was the German adventurer, artist, and writer Balduin Möllhausen, who served as illustrator and an assistant to the expedition's physician and geologist–naturalist, John Strong Newberry. Balduin had traveled with Ives on an earlier expedition across New Mexico in 1853–1854, under the command of Lt. Amiel Weeks Whipple, surveying the potential route for a railroad to the Pacific coast. Möllhausen wrote a book about that trip; and he would write another one, in two volumes, about his experiences with the Ives expedition.[3]

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[2] J. C. Ives, *Report upon the Colorado River of the West, explored in 1857 and 1858* (Washington, 1861), one volume comprising five separately authored and paginated parts. This was produced by order of Congress, as both House and Senate Executive Documents with two maps, differing in that the Senate version added two geological maps. Ives' engaging narrative, "General Report," is Part I of the complete 1861 *Report*. One should read it for a wealth of additional information. J. S. Newberry's "Geological Report" (Part III) similarly contains quite a lot of narration in addition to the science. The volume was, incidentally, Ives' last official production, submitted to the Secretary of War on May 1, 1860, but by the time of its publication he had left Washington, having defected to the Confederate army.

[3] Balduin Möllhausen, *Tagebuch einer Reise vom Mississippi nach den Küsten der Südsee* ('Journal of a trip from the Mississippi to the shores of the South Sea') (Hermann Mendelssohn, Leipzig, 1858). Möllhausen, *Reisen in die Felsengebirge Nord-Amerikas bis zum Hoch-Plateau von Neu-Mexico, unternommen als Mitglied der im Auftrage der Regierung der Vereinigten Staaten ausgesandten Colorado-Expedition* ('Travels into the Rocky Mountains of North America to the High Plateau of New Mexico, undertaken as a member of the Colorado Expedition on behalf of the United States Government') (Otto Purfürst, Leipzig, [1860?], and Hermann Costenoble, Leipzig, 1861), 2 volumes under each imprint. [For a study of the Leipzig printings of the *Reisen*, see Earle E. Spamer, *The Leipzig Imprints of Balduin Möllhausen's* Reisen in die Felsengebirge Nord-Amerikas *(1860, 1861): Bibliographical Notes* (Raven's Perch Media, Philadelphia, 2022 [PDF], https://ravensperch.org).]

Although Ives, Möllhausen, and Newberry are well known to readers of the American West, *Explorer*'s engineer is a castaway in history; so too the boat's industrial builder. Until now he was identified only as "Mr. Carroll," and after his run up the Colorado and back no one wondered what had become of him, nor indeed asked who he was. The boat's manufacturer also has been mentioned only by name, in passing—Reaney, Neafie and Company. Yet it was that firm's Carroll who, with difficulty, put *Explorer* together after its long trip west in pieces, and with the pilot handled it upriver nearly to the doorway to the Grand Canyon. And the separate land expedition conducted by Ives from the Colorado River eastward to Fort Defiance, stopping a couple of times at the Grand Canyon, was operatively possible due to Carroll's engineering skill that delivered them safely to the drop-off at Beale's Crossing.

Even the limited records disclosed in this book allow us to finally learn something about *Explorer*'s overlooked engineer. Ives' narrative is an excellent witness to the competence and resourcefulness of this young man, but the lieutenant's observations have before now been only brief, edited remarks in southwestern historians' work because no one has advocated for Carroll's essential role in the expedition. Möllhausen's own narrative, itself largely overlooked because it is delivered in two volumes of wearying German Fraktur, fortunately gives further insights into Carroll's role and demeanor during the upstream run. And the two—Ives and Möllhausen—have not until now been brought together to tell this story.

Carroll and the firm that built *Explorer* receive their due here. We gain an appreciation for why *Explorer* was the kind of boat it was. We see, as best as is presently possible, who Andrew Carroll was, what sort of a worker he was, and that his contributions meant success for Ives' mission. It made possible the first geographical, scientific, and artistic descriptions of the Grand Canyon—though Carroll himself never got to see it. Yet despite what is outlined here, the engineer fades into the blurry mists of history; we still find only bits and pieces of his life. His steamboat might be gone forever, too; its isolated grave was found in Sonora in 1930, and today the site is replaced by irrigated farmlands.

Balduin Möllhausen's Grand Canyon

An English Translation from

Chapters 21–25 *of*

'Reisen in die Felsengebirge Nord-Amerikas bis zum Hoch-Plateau von Neu-Mexico' (1861)

edited by Earle E. Spamer

CHAPTER 18

BALDUIN MÖLLHAUSEN'S GRAND CANYON (2022)[1]

AN ENGLISH TRANSLATION FROM CHAPTERS 21–25 OF "TRAVELS INTO THE ROCKY MOUNTAINS OF NORTH AMERICA TO THE HIGH PLATEAU OF NEW MEXICO"(1861)[2]

with a transcription of coinciding parts from Chapters 6–8 of the "General Report" of Lt. Joseph C. Ives' Report Upon the Colorado River of the West *(1861)*

EDITED BY EARLE E. SPAMER

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1 https://ravensperch.org/wp-content/uploads/2022/10/MOLLHAUSEN_.pdf (8 MB, 150 pp.)

2 Balduin Möllhausen, *Reisen in die Felsengebirge Nord-Amerikas bis zum Hoch-Plateau von Neu-Mexico, unternommen als Mitglied der im Auftrage der Regierung der Vereinigten Staaten ausgesandten Colorado-Expedition* ('Travels into the Rocky Mountains of North America to the High Plateau of New Mexico, undertaken as a member of the Colorado Expedition on behalf of the United States Government') (Otto Purfürst, Leipzig, [1860?], and Hermann Costenoble, Leipzig, 1861), 2 volumes under each imprint. [For a study of the Leipzig printings of the *Reisen*, see Earle E. Spamer, *The Leipzig Imprints of Balduin Möllhausen's* Reisen in die Felsengebirge Nord-Amerikas *(1860, 1861): Bibliographical Notes* (Raven's Perch Media, Philadelphia, 2022 [PDF, 2 MB, 20 pp., https://ravensperch.org/wp-content/uploads/2022/11/Mollhausen_Reisen_notes.pdf].

PREFACE

HEINRICH BALDUIN MÖLLHAUSEN (1825–1905) left Germany for the first time in 1849 to hunt in the American Midwest, where he supported himself with the odd job of clerking or commercial painting. Two years later he met up with Friedrich Paul Wilhelm, Herzog von Württemberg, better known in American history as Duke (or Prince) Paul Wilhelm of Württemberg, who with a small entourage had set out to explore the Rocky Mountains. Möllhausen asked to join him, and served as a draftsman. They reached Wyoming, but on the return trip Möllhausen was left behind when there was no more room in a mail coach that took the duke away from a snowstorm that had killed their horses. Balduin barely survived, alone on the prairie for several months, and eventually was rescued by Indians. He later rejoined the duke in New Orleans and returned home to Germany. He was soon introduced to the great adventurer–geographer Alexander von Humboldt and met Carolina Seifert, the daughter of Humboldt's private secretary—or the unmarried Humboldt's own daughter, if some would have it—whom he later married. From then on, Möllhausen was a keen follower of his mentor, and Humbolt provided prefaces and salutary promotions for Balduin's publications.

His experiences on the prairie gave him a taste for further adventures promised in the American West. With a letter of introduction from Humboldt, Möllhausen returned to America to see if he could join one of the western government-sponsored expeditions then being planned. He was assigned as a draftsman for the 35th parallel Pacific Railroad survey of 1853–1854 under the command of Lt. Amiel Weeks Whipple, which passed through the area south of the Grand Canyon, eventually arriving on the lower Colorado River and proceeding to the west coast. He also provided illustrations for Whipple's final report (1856).[3] Back in Germany again, he also published his own account of

[3] A. W. Whipple, *with* J. C. Ives, Report of explorations for a railway route, near the thirty-fifth parallel of north latitude, from the Mississippi River to the Pacific Ocean. In *Reports of Explorations and Survey, To Ascertain the Most Practicable and Economic Route for a Railroad from the Mississippi River to the Pacific Ocean. Made under the direction of the Secretary of War, in 1853-4, according to Acts of Congress of March 3, 1853, May 31, 1854, and August 5, 1854. Volume III.* A. O. P. Nicholson, Printer (Washington,

the expedition in 1858, *Tagebuch einer Reise vom Mississippi nach den Küsten der Südsee* [Diary of a Journey from the Mississippi to the Coasts of the South Sea *(Pacific Ocean)*], which has seen reprintings and translations.

In 1857, Lt. Joseph C. Ives, U.S. Army Corps of Topographical Engineers, who had also accompanied the Whipple expedition, invited Möllhausen to join him again, on an expedition that this time Ives would command, as the expedition's illustrator and assistant in natural history. After the conclusion of this expedition he returned to Germany for the final time, where he turned out in 1861 his *Reisen in die Felsengebirge Nord-Amerikas bis zum Hoch-Plateau von Neu-Mexico* [Travels into the North American Rocky Mountains to the High Plateau of New Mexico]. This expedition was (officially) to ascertain the head of navigation of the Colorado River, though it also investigated the extent of Mormon incursions into the regions south of Utah. Once the head of navigation was determined on a trip upriver in the *Explorer*, a small steamboat built in Philadelphia just for this expedition,[4] Ives divided his command into two groups; one returned down the Colorado River, the other, under Ives, traveled eastward overland. Although some intentions were had to explore other areas, the group finally concluded its work at Fort Defiance, New Mexico Territory.

At the conclusion of the river expedition, Möllhausen accompanied the overland party, which became the first to purposely reach the Grand Canyon in an attempt to ascertain more surely the geographical relationships of the region, most importantly the coordinates of the confluence of the Little Colorado River with the Colorado (which they failed to accomplish due to the impassable canyons and side canyons).

Ives' formal report was published as a U.S. Congressional document in Washington, D.C., in 1861.[5] The significance of Möllhausen's work to Grand

1856), separately paginated sections (647 pp. total). (Volume: U.S. 33rd Congress, 2nd Session, House Executive Document 91.) [See Part 1, "Itinerary" [1854], and Part 2, "Report on the Topographical Features and Character of the Country" [1856].]

4 About the *Explorer*, see a historical review from the perspective of the boat's engineer, by Earle E. Spamer, *Explorer: Andrew J. Carroll on the Colorado River, 1857–1858* (Raven's Perch Media, Philadelphia, 2022), https://ravensperch.org.

5 Joseph C. Ives, "Report Upon the Colorado River of the West, Explored in 1857 and 1858 by Lieutenant Joseph C. Ives, Corps of Topographical Engineers, Under the Direction of the Office of Explorations and Surveys, A. A. Humphreys, Captain Topographical Engineers, in Charge. By order of the Secretary of

Canyon–Colorado River history is that it predates the release of Ives' formal report, by several months at least; it constitutes the first-published comprehensive accounting of explorations on the Colorado River and in the Grand Canyon. It also provides details and perspectives not included in Ives' report. It is unfortunate that his Grand Canyon story, at least as in his own words, has been lost in the backwaters of canyon history, having lacked a translation that would have made it accessible to English-speaking readers. This volume offers an expedient answer to the problem, at least until such time that a more proper historiographical study of this part of the expedition is produced by scholars in the field.

In Germany, Möllhausen finished his illustrations for Ives' report, a series of watercolors that were used to produce many of the lithographs in that report. Other illustrations were created by Friedrich Wilhelm von Egloffstein, who after having accompanied other expeditions in the West was attached to the Ives expedition as cartographer and illustrator. Möllhausen's watercolors disappeared, but were subsequently rediscovered in the 20th century, where they now are in the collections of the Amon Carter Museum and have been the subject of their own book. Egloffstein, too, along with his maps and illustrations, has also been the subject of recent publications, including a biography centered on his cartographical work. [See the "illustrations" and "maps" sections in *Balduin Möllhausen's Grand Canyon*.]

After Möllhausen published his Colorado River expedition account, which was translated in 1867 into Swedish but never into any other language, he settled into a successful life as a writer of dozens of adventure stories and novels, many of them set on the American frontiers, with a special, though occasional, emphasis on the Mormon culture. For these writings he became known as the "German Cooper," after the American adventure novelist James Fenimore Cooper.

War", *U.S. 30th Congress, 1st Session, House Document 90* [concurrently produced as an unnumbered *Senate Document.* (U.S. Government Printing Office, Washington, 1861), 5 parts and four appendices in 1 volume. Accompanying the volume were two large map sheets, drafted by the baron F. W. von Egloffstein.

MÖLLHAUSEN'S FIRST REPORT, 1858

MÖLLHAUSEN WAS in fact the first to publish anything about the Colorado River expedition. His brief report appeared in a German serial in the fall of 1858, even before J. C. Ives had had a chance to complete his own *preliminary* report on the expedition, which appeared in a year-end summary of U.S. Army activities.[6] Inasmuch as Möllhausen's report was first, and which dealt mostly with the Grand Canyon leg of the land expedition, that part is recounted here, in translation: [7]

> Continuing the journey north-east one finally comes to the angle formed by the southwest-flowing Colorado and its tributary coming from the southeast, the Colorado Chiquito, and at the same time to a barometric elevation of 9,000 feet above sea level and at least 7,500 feet above level of the Colorado. There now begins the highland, which seems to stretch out in all directions like a wide plain, the horizon of which is seldom interrupted by misty hilltops, but more frequently by crevasse-like indentations in the plain itself. There is an indescribable, frightening loneliness up there; stunted cedars seem to change their shape in the distance through mirage, or, dead and robbed of their dark green adornment, rise up like the weathered, gigantic antlers of prehistoric stags. Scorching heat up there warms the rocky, waterless plain, withers the grasses that sprout in hidden corners, and ripens the thorny fruits of the cacti. At other times, an icy storm accompanied by violent thunder whirls dense masses of snow over the plateau, threatening the demise of the

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6 "Colorado Exploring Expedition. Preliminary Report of 1st Lieutenant J. C. Ives, Topographical Engineers, to Captain A. A. Humphreys, Topographical Engineers, in charge of Office of Explorations and Surveys, War Department, November, 1858." *As a part of* A. A. Humphreys, [Annual report to the Secretary of War, December 6, 1858]. *From* John B. Floyd, "Report of the Secretary of War," *in Message of the President of the United States to the two houses of Congress at the commencement of the Second Session of the Thirty-fifth Congress: December 6, 1858* (William A. Harris, Printer, Washington), pp. 608-619. (President's message: *U.S. 35th Congress, 2nd Session, Senate Executive Document 1, Serial 975.*) [See in Appendix 2 of *Balduin Möllhausen's Grand Canyon*.]

7 Balduin Möllhausen, "Der Rio Colorado des Westens," *Zeitschrift für Allgemeine Erdkunde*, New Series, Volume 5, pp. 438-443. This translation, as well as the original German text, also appears in *The Grand Canyon! A Worldwide, Year-By-Year Anthology and Annotated Bibliography of Personal Encounters with the World's Greatest Draw, 1540–2022* (Earle E. Spamer, compiler, ed., Raven's Perch Media, Philadelphia, 2022, No. 19, pp. 45–48), https://www.ravensperch.org.

people and animals who have strayed there, commanding awe before the mighty, all-encompassing force of nature.

If, with the intention of reaching [either] the big or the little Colorado, one directs one's steps northwards, to where cracks in the ground form mighty towers and walls that stand out sharply against the horizon, but at the same time also reveal the course of large bodies of water, you soon find yourself in a labyrinth of gorges that are all the more surprising for their depth, as they are hardly recognizable from a distance because of the slight subsidence of the ground. It is only partially possible to follow such a gorge, as very soon chasms of 50 to 500 feet in depth interrupt it. Riding on a protruding horizontal rock formation as if on the outermost edge of a roof along horrible abysses, one now also reaches places where even the sure hooves of mules can no longer find footing and only the way back remains open, a way that leads over terrible depths seeming to float freely in the air, where one likes to shade one's eyes in order not to see the rocky masses that seem to slide lazily past one another, where the stones that come loose under one's feet do not roll down noisily but fly inaudibly through wide spaces, falling heavily on the rocky ground far below, and the shock thus produced, but muffled by the distance, echoes eerily in the cracks and crevices. What cannot be achieved with the help of animals, man still attempts with his own strength. Using long ropes on the perilous path, we went farther, but only so low as to see the impossibility of entirely traversing the difference in elevation between the plateau and the Colorado, which there is over 7,000 feet. It was therefore only left for us to gain the heights again at that point and to cast a glimpse into this peculiar, closed as it were, world.

What lies before the admiring eye seen from the dizzying heights, words cannot adequately describe; like chaos deep ravines and isolated, box-shaped remains of the highlands merge into one another; above the dry, brick-red sandstone bed below, the formations of different epochs tower thousands of feet high, clearly recognizable by the glaring color contrasts; the walls are vertical, as if the slightest shock could throw them down; one trembles at such a sight and involuntarily steps back from the abyss; wherever one turns one's eye, one encounters bare dead rock everywhere, everywhere the banks of deeper, more distant gorges seem to appear, calling to the inquiring traveler an imperative stop, but

at the same time awakening a faint sense of infinity at the thought: that the falling drops [of rain] formed the gorges that yawn at him on all sides.

We got to the canyons 3000 feet deep; a few miles farther, but still 4000 feet below, flowed the Colorado, but it would have taken more than human strength to go where we could have sighted the mysterious stream; we parted without seeing it again. Thus man often stands close to his goal, but in the face of terribly sublime nature he feels his own powerlessness; he envies the consecration that hovers over the abysses on sure wings, he follows her in spirit and with foreboding horror creates for himself an image of the rocky valley of the Colorado of the West, which will certainly remain shrouded in mysterious darkness for a long time to come.

Several times we tried to get further northeast down to the Colorado, whose banks we thought we could distinguish from the foot of the San Francisco Mountains, but we found the rocky desert impenetrable everywhere; even the friendly Moqui [Hopi] Indians seemed dissuaded by a particular reluctance to seek or point to a trail down to the Colorado. We saw none of the high falls which a river must descend, for a distance of about 80 German miles, nearly 3,000 feet in elevation. We gave up our work only when the complete lack of food and the complete exhaustion of the mules that were left to us compelled us to do so. We escaped to New Mexico and were fortunate enough to bring all our notes, drawings and collections with us.

INTRODUCTION TO THE TRANSLATION

THE MAIN PURPOSE of this translation has been to make the entirety of Möllhausen's account of the Grand Canyon portion of the expedition under Lt. J. C. Ives available for the first time in English, more than a century and a half after its original publication. The job of making the entire two volumes available in English will have to be a project for others. While others of Möllhausen's accounts of American explorations, tendering his image as a rugged trapper, hunter, and adventurer, have been translated into English, his story of the Colorado River expedition, published in 1861, was only translated into Swedish, and that in 1867. Even though his expedition record is a lively contrast to the

detailed (and itself engaging) "General Report" of Lt. Ives, also published in 1861, only bits of his work have appeared in English translation, over many years, and the Grand Canyon account still begged to be told as a single story. Thus it is high time that readers of Grand Canyon literature in English have access to Möllhausen's experiences and impressions.

The translation was created through the use of Google Translate online. One must agree with those who know, that there is no such thing as a word-for-word translation, that it is an art form responding to context and grammatical and other nuances. Google Translate is simply a "neural machine translation service" that takes on a sentence at a time, a service that which over time "learns" to construct better and more grammatically correct sentence structure and word selections.

But far from this being a simple transfer of results from Google Translate, this volume is the product also of judicious editing, first for sense, then when necessary using retranslations to avoid awkward synonymies introduced by the artificial translator. Conventional German–English dictionaries have assisted, as also have other translation resources. Möllhausen's run-on sentences contribute a stilted feel to the translation, too, which emphasizes the fact that a more elegant rendition by someone who is fluent in both languages would produce a clearer text for readers in English, even though that would likely be at the expense of Möllhausen's effusive narrative style that also includes an occasional interminable paragraph spanning several pages.

In order to compare Möllhausen's observations and remarks against the official report of the Colorado River expedition by Lt. Ives, an appendix herein transcribes from the same period Ives' journal entries from his "General Report." This is provided strictly as a historical comparison and is not meant to imply that either report supersedes the other. Ives' report is that of a military commander, while Möllhausen's is an adventure story written for his German audiences.

What is particularly striking about the two accounts is that they agree so much in specific observations, sometimes with the same terminology, which tends to corroborate a great deal of remembered conversation between the

narrators while they were in the field. Although there had been time enough for Möllhausen to send his watercolor illustrations back to America to be made into lithographic illustrations for Ives' official *Report*, there would have been impossible for either to have borrowed from the writings of the other, as Möllhausen's *Reisen* and Ives' *Report* were published nearly contemporaneously, although Möllhausen was, strictly speaking, chronologically first. The German did, though, have a chance to see Ives' *preliminary* report produced at the end of 1858, inasmuch as he quoted very briefly from it in Volume 1 (p. 380) of his *Reisen*.

All references to "New Mexico" are of course to New Mexico Territory as it existed prior to the creation of Arizona (in 1861) and for a while incorporating a small wedge of today's southern Nevada.

The Grand Canyon itself was known as "Big Canyon" in those days, the name used by Ives in his *Report* and by which it appears on Egloffstein's map. John Strong Newberry, the expedition's naturalist whom Möllhausen assisted in those duties, preferred another contemporary rendition of the name, "Great Canyon."[8] However, Möllhausen, even though he notes the names of other canyons, does not refer to the canyon by any particular name, prefering to focus more consistently on the passage of the "great Colorado."

Readers of both Möllhausen and Ives should rightfully keep in mind the presence of Euro-American cultural and social biases of the day, that some of the observations and opinions herein about Native Americans, and to a lesser extent Mexicans, are offensive. Nonetheless, these are their words, without further editorial remark since the present volume is neither one of historiography nor of critical assessment.

[8] Regarding the names for Grand Canyon, see Earle Spamer, "Big Canyon, Great Canyon, Grand Canyon: The mysterious evolution of a name", *The Ol' Pioneer* (Journal of the Grand Canyon Historical Society), Volume 33, no. 1 (Winter 2022), 8–18. [See also Spamer, *Naming the Grand Canyon* (Raven's Perch Media, 2024).]

PERSONNEL

SINCE THIS IS an extract from a much fuller two volumes, several people are mentioned in this translation appeared first in Volume 1, but may be referred to in Volume 2 only by surnames.

Friedrich Wilhelm von **Eggloffstein**	German baron; cartographer and artist; participated in earlier expeditions in the West
Ireteba	Mohave Indian "sub-chief"; a principal guide for the Ives expedition, first known to Ives and Möllhausen at the end of A. W. Whipple expedition of 1853–1854; and in that the Mohaves did not recognize this name it is probably a corruption
Joseph Christmas **Ives**	Lieutenant, U.S. Army Corps of Topographical Engineers, in command of the expedition; with Möllhausen he also accompanied the Whipple expedition
Balduin **Möllhausen**	German adventurer; artist and assistant to John Strong Newberry; participated in earlier expeditions in the West
John Strong **Newberry**	Naturalist to the expedition, whose speciality was as a geologist; he also served as the expedition's physician
George H. **Peacock**	A Missourian from California, master of the pack train; about whom little is known
John **Tipton**	Lieutenant, U.S. Army, 3rd Artillery, from Fort Yuma; in command of the military escort

Möllhausen also takes note of three other Indian guides, **Kolhokorao**, **Hamotamaque** and **Juckeye**, who seem not to be identified in Ives' expedition record, at least by names such as these. As with Ireteba, their names are likely corrupted. Juckeye was a Yuma Indian who had accompanied the party all the way from Fort Yuma. Möllhausen further mentions several "Wallpay"

(Walapai, or Hualapai) Indians who joined the land expedition after they had reached Diamond Creek, but he gives no names for them. Ives refers to this tribe as the "Hualpais" in both the singular and plural. He also refers to Yuma Indians in his expedition account, but, other than Juckeye, without names.

Both Möllhausen and Ives also mention the Mohave chief, Cairook, who was first known to them during the Whipple expedition. Cairook appears again during Ives' river expedition. He did not accompany them, but he did direct Ireteba to join the land expedition.

"Mariano" is mentioned in passing by Ives, who was a Yuma Indian interpreter that accompanied them during the expedition on the river. He did not accompany the land expedition. Möllhausen referred to him as "Mariando."

In their texts, Möllhausen and Ives both make references to the surnames "Sitgreaves," "Whipple," and "Beale," the commanders of earlier expeditions across the northern part of New Mexico Territory. They are extraneous to the events of this translation as well as to the Colorado River expedition overall, even though both writers took note of the pathways that were blazed by these earlier expeditions.

The expedition commanded by Lt. Lorenzo Sitgreaves in 1851 had meant to follow the Zuni and Little Colorado Rivers to the confluence of the Colorado, en route to the west coast, but by the time the party had reached the San Francisco Peaks men and animals were ailing, and on the advice of their guide they abandoned the route — and a good thing, too, inasmuch as they had no real appreciation for the impassable canyons that would have been on their track. That expedition continued across the 35th parallel route, reaching the Colorado River on its lower course below the canyons, then moved on to the west coast. "Sitgreaves Pass," mentioned by Möllhausen and Ives, takes its name from that expedition; years later, iconic Route 66 would follow it through the Black Mountains.

The expedition commanded by Lt. Amiel Weeks Whipple in 1853–1854 was an exploratory venture along the 35th parallel. It was one of several government surveys sent out to investigate the best routes for a railroad to the Pacific coast. Whipple's expedition explored the 35th parallel route for a track

between Fort Smith, Arkansas, and Los Angeles, California; it eventually was followed by the Atlantic & Pacific Railroad and later by the Santa Fe Railway, which improved on it and even built a spur to the Grand Canyon.

The expedition commanded in 1857 by Edward Fitzgerald Beale, a former U.S. Navy lieutenant, was to establish the route of a wagon road across the 35th parallel, between Fort Smith and Los Angeles. This westbound expedition was also historical for its having experimented with the use of camels. Much has been written about the preparation for and the execution of that mission. Incidentally, in his *Reisen* Möllhausen wrote of seeing the camels in California (in his Chapters 3 and 5), not long after Beale arrived there. In January 1858, Beale's party returned eastward with some of the camels, and at the Colorado River crossing, by an astonishing coincidence, Capt. George Alonso Johnson, with his Yuma-based steamboat *General Jesup*, was there to help convey them cross the river (the camels swam across). Coincidentally, coming up the river not far behind Johnson was Ives on his government exploration to ascertain the head of navigation on the Colorado. Johnson, though, had set out from Yuma ahead of Ives on his own, unofficial exploration to establish that point. Ives, in his journal, judiciously made no mention of Johnson's exploit, despite having encountered the larger steamboat on its journey back downriver and receiving intelligence from Johnson and military men who had accompanied him. Ives also ignored the fact that his party also saw a monument that Johnson had erected on shore even though the steamer captain had not in fact reached the true head of navigation. Möllhausen, on the other hand, did take note in his *Reisen* of the *General Jesup*'s adventure, including its jump on Ives from Yuma and its misfortune of having sunk en route back to the fort. Möllhausen later painted the view at Beale's Crossing, embellished with a number of camels crossing the river, a detail that he himself of course had not witnessed.[9] The same scene, an engraving after Möllhausen's picture though not directly credited, is depicted—minus the camels—in Ives' figure 18 (his p. 74), "Beale's Pass." ▪ ▪ ▪

[9] This painting is is the Amon Carter Museum of American Art, Fort Worth, Texas, where it also is digitally shown online in its collection of Möllhausen's watercolors: https://www.cartermuseum.org/collection/beales-crossing-beales-pass-1988124.

GRAND CANYON UNDERGROUND

The Bibliographical Record of Caves in
Grand Canyon National Park,
Grand Canyon–Parashant National Monument,
and Vicinity (Arizona)

compiled by Earle E. Spamer

CHAPTER 19

GRAND CANYON UNDERGROUND

THE BIBLIOGRAPHICAL RECORD OF CAVES IN GRAND CANYON NATIONAL PARK, GRAND CANYON–PARASHANT NATIONAL MONUMENT, AND VICINITY (ARIZONA) (2ND EDITION 2025)[1]

COMPILED BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2025/01/Grand-Canyon-Underground_2nd-ed.pdf (2.6 MB, 92 pp.)

THIS IS NOT A "GUIDE" TO GRAND CANYON CAVES; IT IS A BIBLIOGRAPHICAL AND HISTORICAL RECORD OF *PUBLISHED MATERIALS* THAT PERTAIN SPECIFICALLY OR PARTLY TO EACH NAMED CAVE. LOCATIONS ARE NOT GIVEN FOR THE CAVES DUE TO CONCERNS FOR RESOURCE MANAGEMENT AND CULTURAL SENSITIVITY, ALTHOUGH A FEW OF THEM ARE VERY WELL KNOWN EVEN IF THEY ARE NOT ACCESSIBLE BY THE GENERAL PUBLIC. CONTACT GRAND CANYON NATIONAL PARK, GRAND CANYON–PARASHANT NATIONAL MONUMENT, OR THE BUREAU OF LAND MANAGEMENT ARIZONA STRIP OFFICE AND LOCAL SOURCES FOR UP-TO-DATE INFORMATION PERTAINING TO ACCESS RESTRICTIONS, BACKCOUNTRY PERMIT REQUIREMENTS, AND TRAVEL CONDITIONS.

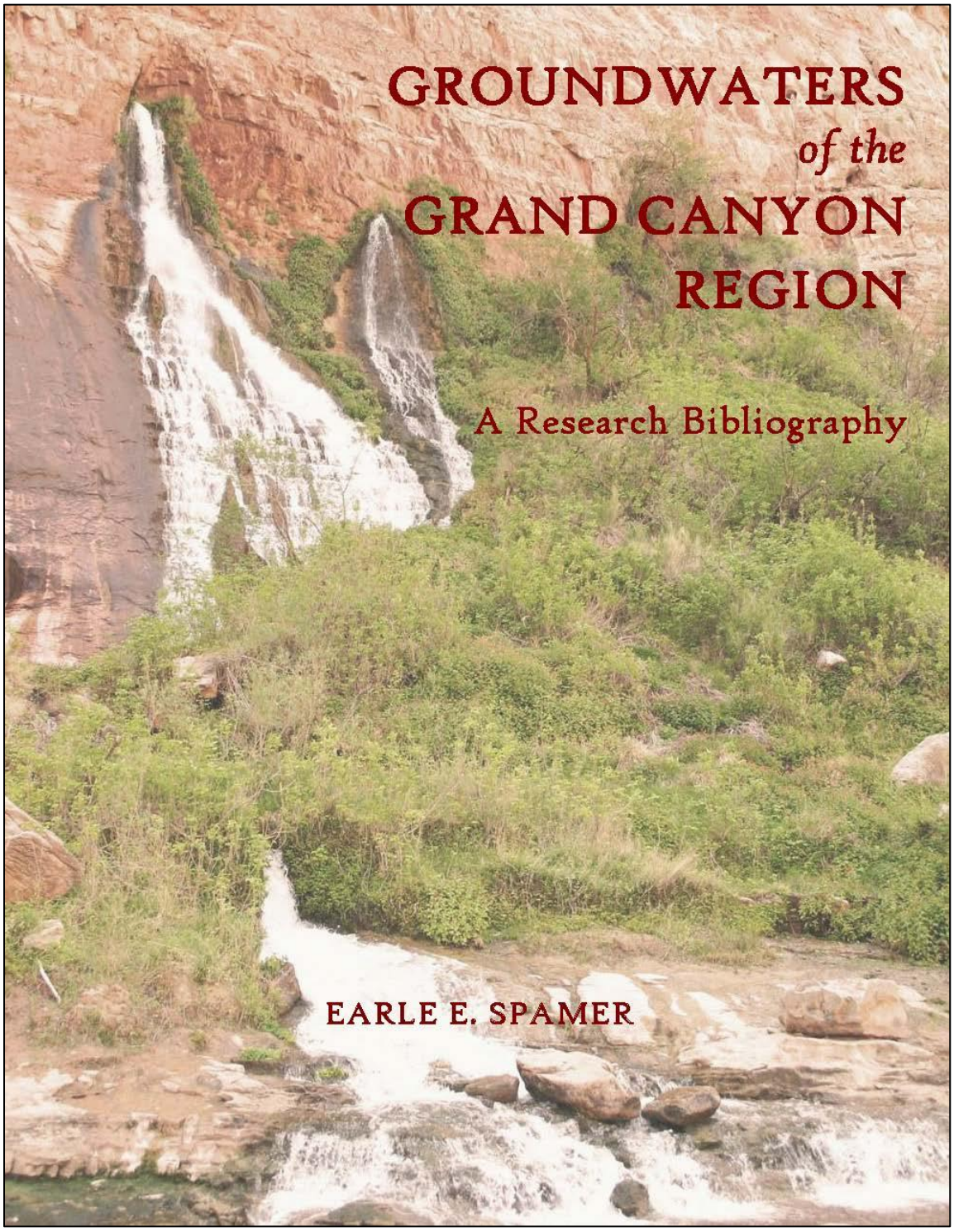
INTRODUCTION

THIS IS A bibliographical and historical compilation that pinpoints individual publications that pertain to, in whole or in part, these caves. There are numerous more caves in the region, of course, but these are the ones that have been mentioned in publicly available publications. The federally administered areas in which they are found are the Grand Canyon National Park and Grand Canyon–Parashant National Monument. Additionally, nearby Arizona Strip locales and a few extralimital areas of regional interest are noted. Only one site mentioned herein seems to be on lands of Native American jurisdictions [Corkscrew Cave]. Despite several caves being very well known, in order to adhere to issues of resource management and cultural sensitivies, no geographical locations are identified in this volume. Most of the cave names are informal, their names taken from the publications.

It is not the purpose of the present bibliogaphy to serve as a universal index; numerous other caves are surely known and may have been mentioned in publications that I have not found. Rather, this is a resource manager's and historian's guide to publications that over the years have "homed in" on these caves. Some are news reports, others are "caving" accounts by individual visitors, and still others are part of scientific studies or administrative resources surveys. It is important to keep in mind that many visitations were

made before rigorous permitting was instituted by the National Park Service and other agencies. More citations are grouped informationally: these list publications that mention caves of this region but do not note individual names; others are pertinent in very important historical or scientific contexts, and the caves that contributed to these reports will be well known intuitively. Again, this is a resource and historical overview, which tracks specific publications that have directed their attentions to particular caves.

Only two caves in this region are freely open to visitation. The Cave of the Domes on Horseshoe Mesa, along the the Grandview Trail in Grand Canyon is accessible but not maintained as a tourist destination and it is the traveler's responsibility to assure their safety and, if more than a day is dedicated to the trip, to adhere to any camping permits for Horseshoe Mesa are obtained. The nearby abandoned mines of Horseshoe Mesa are not open to visitation. The commercial "Grand Canyon Caverns" near Peach Springs, along Route 66, is a well known "tourist cave." Access to all other caves within federal lands requires authorization for visitation and permits for backcountry use; and some caves are gated to prevent unauthorized entry, protecting cultural, ecological, and scientific resources within them. Perhaps the best known among these is historic Stanton's Cave, in Marble Canyon, which thousands of Colorado River travelers pass by each year; its opening can be visited. Just as famous, perhaps, is Rampart Cave in far western Grand Canyon, also along the Colorado but not as obviously visible; and in any case it is much less physically accessible today due to changes effected by the lowering Lake Mead surface in the face of climatic changes in the Colorado River basin. ▪ ▪ ▪


GROUNDWATERS
of the
GRAND CANYON
REGION
A Research Bibliography
EARLE E. SPAMER

CHAPTER 20

GROUNDWATERS OF THE GRAND CANYON REGION (ARIZONA)

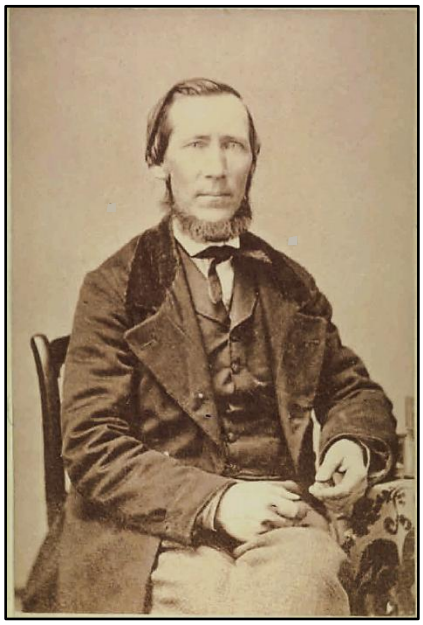
A RESEARCH BIBLIOGRAPHY (2024)[1]

a research bibliography of groundwater hydrology and the record of environmental issues, legislative oversight, and native american cultural concerns of groundwater use: with annotations: 1880–2024

plus: a biblography of Grand Canyon springs ecology

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2024/11/Groundwaters.pdf (2.7 MB, 102 pp.)



GEORGE VASEY

(1822–1893)

carte de visite, 1867

Riding down a short distance a beautiful view was presented. The river turned sharply to the east, and seemed inclosed by a wall set with a million brilliant gems. What could it mean!—every one wondered. On coming nearer we found a fountain bursting from the rock high overhead, and the spray in the sunshine formed the gems which bedecked the walls. The rocks below the fountain were covered with mosses and ferns and many beautiful flowering plants. We named it “Vasey's Paradise,” in honor of the botanist who traveled with us the previous year.

— John Wesley Powell

“The Cañons of the Colorado.”
Scribner’s Monthly, Vol. 9, no. 4 (February 1875), p. 406

INTRODUCTION

IN RECENT YEARS there has been increased attention to the groundwaters of the Grand Canyon and the surrounding region. Hydrogeological investigators have made significant inroads toward understanding how the complex system of "plumbing" works in this area, a subject that was, frankly, relatively basic just a generation ago. There are growing concerns about the effect of human activities, especially through breccia-pipe uranium mining, on the channeling of groundwaters to the rare springs of the Grand Canyon and on the chemical and health qualities of the water. The impacts are on humans and the wildlife that depend upon those springs. One source in particular, Roaring Springs, which comes from the Kaibab Plateau karst systems, provides 100 percent of the waters used by millions of visitors and residents yearly on the South and North Rims both. Yet even more concerning is how human-caused changes may affect the sources that are important to Native Americans who have lived here for millenia. These waters shape the livelihoods of these people and, more notably, affects their time-honored cultural and spiritual relationships with the very lands that contribute these waters.

Concerns over the deterioration of water flows and their contamination, and the cultural impacts this has on Native American peoples, have been addressed to agencies at federal and state levels, which administer the laws and policies established for the utilization of lands in and about the Grand Canyon and the protection of natural resources there. On several occasions, federal-level protections have been sought for the greater Grand Canyon ecosystem. Only in 2023 was a broad measure of protection implemented by a Presidential declaration through the Antiquities Act of 1906, when Joe Biden, in the shadow of culturally significant *Wii'i Gdwiisa*—Havasupai, clench-fist mountain; Red Butte in modern geography—signed the proclamation that created the nearly one-million-acre Baaj Nwaavjo I'tah Kukveni–Ancestral Footprints of the Grand Canyon National Monument. Bounding in three parcels the federally-administered lands of the Grand Canyon and vicinity, the monument was created to protect *Baaj nwaavjo* (Havasupai, "where Indigenous

peoples roam"), and *i'tah kukveni* (Hopi, "our ancestral footprints"), reflecting the significance of the Grand Canyon area not just to one, but to many Tribal Nations. (Eleven Indigenous Tribes are traditionally associated with the Grand Canyon.[2])

Still, the creation of the national monument, which protects sacred places for cultural and spiritual practices, does not absolutely protect the ecological, scientific, historic, scenic, and cultural values of the greater Grand Canyon landscape. Existing livestock-grazing, hunting, and fishing uses are continued, but, egregiously, existing uranium-mining sites may continue to be used. While such mines and claims are on both sides of the Grand Canyon, the most socially and politically prominent of these in recent years is near Red Butte—the Pinyon Plain Mine, charily renamed by its corporate owners from its geographically attractive name, Canyon Mine, in light of disapproval of environmental and Indigenous groups. It is this mine that has greatest concerns for disrupting the groundwater connections to South Rim springs, including the most precious of them that feed Havasu Creek, the literal lifeblood of the Havasupai people. The hauling of uranium ore through the Navajo Nation, which occurred soon after the reopening of the mine in 2024, is also a paramount concern to the Diné, who have suffered for years the health effects of decades of uranium mining on their lands. Thus indirectly, the same operations that can impact the Grand Canyon's groundwaters go abroad far beyond the canyon.

All this is a reminder that the Grand Canyon is more than the chasm. It is the lands 'round about, and the people there. Its human history embraces five centuries of Western incursions, since 1540, which is nothing compared to Indigenous Peoples' presence from time immemorial; yet the springs were there when they arrived.

This research bibliography is more than a list of publications. Its content—and more directly the content of the cited publications—displays the breadth of interest and activities in the ecology of Grand Canyon's springs, the hydro-

[2] Refer to Earle E. Spamer, *Bibliography of Native Americans Traditionally Associated with the Grand Canyon*, 2nd edition (Raven's Perch Media, 2023). [A 3rd ed. was produced in 2025).]

geology of the karst groundwaters that are their sources. There are as well the concerns that the physical effects of the mining operation inside the plateau can alter the coursework of groundwaters and the ecologies of spring areas. When the spring waters are well used by people, the level of concern escalates. Concerns and reactions also appear among administrative, legal, and legislative agential bodies. In fact, interest in the Grand Canyon's groundwaters goes back at least to 1880, when it seems that the warm springs below Lava Falls of the Colorado River were already recognized, although in those days the reasons for interest were both scientific and commercial (therapeutic, supposedly).[3]

The bibliography is divided into three sections: *Part 1* comprises publications that relate to the physical aspects of groundwaters in the plateaus that bound the Grand Canyon and of springflows at various heads. This includes a few publications that pertain to studies of ancient groundwater systems of the Grand Canyon; specifically, the study and dating of speleothems that may contribute toward understanding the geological incision rates of parts of the Grand Canyon. *Part 2* contains publications that address human aspects of the groundwaters; specifically, matters relating to oversight by administrative entities and legislations, issues pertaining to the localized environments of springheads, and matters of concern to the cultural and spiritual activities of Native American peoples. *Part 3* is a bibliography of springs ecology for sites in the Grand Canyon and vicinity.

The record contained in these citations traces changes in research themes over time and the introduction of novel topics of scientific curiosity and cultural significance alike. At this time at least, the greatest concerns in the Grand Canyon region relate to understanding the hydrological systems within

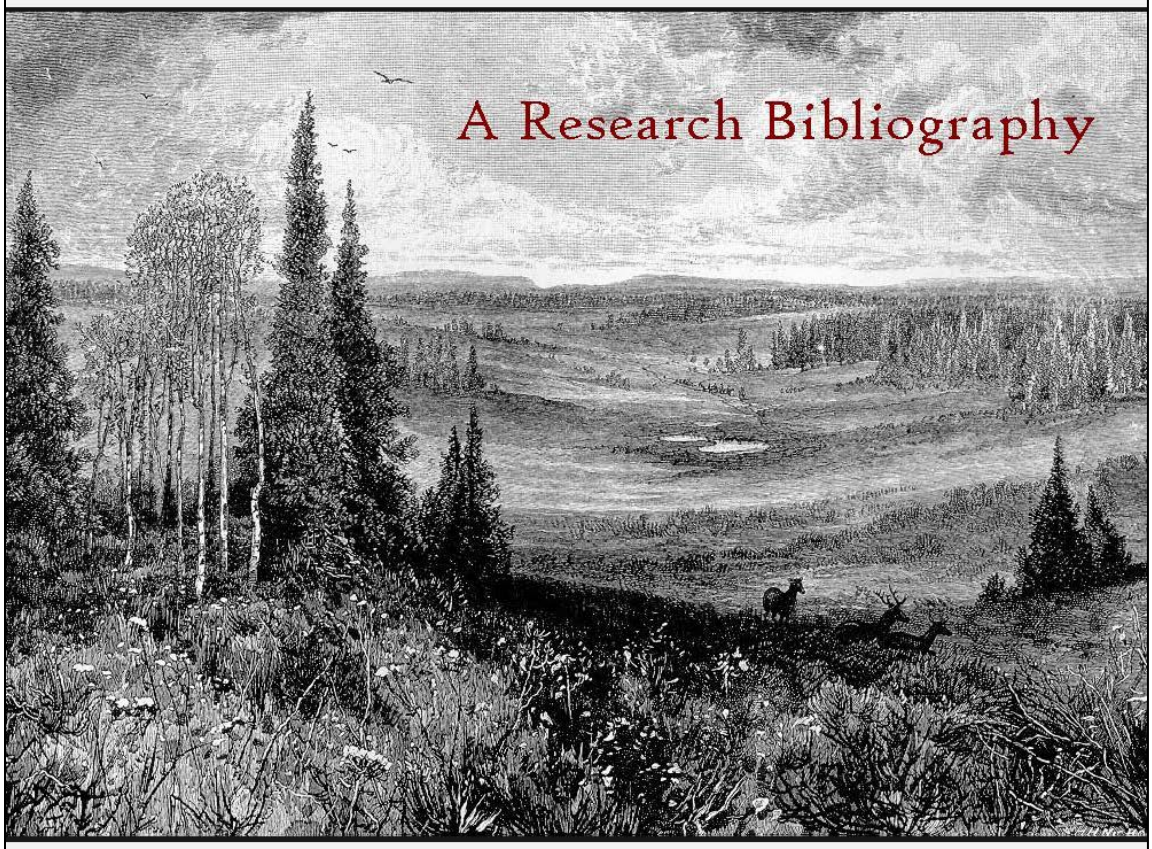
[3] William Pepper, "Report of Committee on Sanitaria and on Mineral Springs," *Transactions of the American Medical Association*, Vol. 31 (1880) (see under "Unanalyzed" springs, p. 557: "Lava Springs in Grand Cañon of Colorado, Arizona", with no data). Another early reference appeared in A. C. Peale, Lists and analyses of the mineral springs of the United States (a preliminary study), *U.S. Geological Survey Bulletin 32* (1886), p. 196; listing "Lava springs, in Grand Cañon of the Colorado River" with a temperature of 89° F (with no further data) and taking note of "Bitter Spring, south of Lee's Ferry, on Colorado River", with no data. (The latter is apparently Bitter Spring of the Bitter Springs AZ 7.5-minute topographic quadrangle, sited near the head of Salt Water Wash near the base of the Echo Cliffs and not along the river.)

the plateaus, and to concerns of anthropogenically produced contamination of these waters.

Omitted are publications that pertain to the legacies of mine wastes, unless they specifically relate to groundwater contamination in this region. Likewise, the geochemistry of the region's geological features known as breccia pipes (which were created by groundwater systems of ancient geological time, long before the systems of modern groundwaters) is not a subject addressed in this bibliography. Those of the pipes that are heavily mineralized are the source of abundant metal ores like copper, nickel, zinc, and uranium, but only the publications that address disturbance through the mining of ores, with concomitant effects on the groundwaters, are listed in Part 2.

For publications that relate to broader ecological and environmental matters, which otherwise are about the environments of the Grand Canyon region, consult Part 19 of the comprehensive bibliographical series, THE GRAND CANON, Volume 1/Part A (Raven's Perch Media, 5th edition, 2025) and separate, specialized bibliography available through Raven's Perch. It is from this series that the citations in this groundwaters bibliography have been extracted *(see next page)*. And regarding the breccia pipes just mentioned, see numerous citations throughout Part 21 of that volume. ▪ ▪ ▪

KAIBAB PLATEAU ECOLOGY



A Research Bibliography

EARLE E. SPAMER

CHAPTER 21

KAIBAB PLATEAU ECOLOGY

A RESEARCH BIBLIOGRAPHY (2024)[1]

an inclusive research bibliography with annotations (1893–2024), Grand Canyon National Park (North Rim) and Kaibab National Forest (North Kaibab Ranger District), Arizona

plus

a chronological–historical bibliography of bioecology and conservation of Kaibab deer

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2024/11/Kaibab-Plateau-Ecology.pdf (2.8 MB, 184 pp.)

It is difficult to say precisely wherein the charm of the sylvan scenery of the Kaibab consists. We, who through successive summers have wandered through its forests and parks, have come to regard it as the most enchanting region it has ever been our privilege to visit. Surely there is no lack of beautiful or grand forest scenery in America, and it is a matter of taste what species of trees are the most pleasing. Probably few people would select the conifers and poplars as the highest types of arboreal beauty. I suspect that the charm consists in influences far more subtle than these outward forms. [. . .] There is a constant succession of parks and glades — dreamy avenues of grass and flowers winding between sylvan walls, or spreading out in broad open meadows. From June until September there is a display of wild flowers which is quite beyond description. The valley sides and platforms above are resplendent with dense masses of scarlet, white, purple, and yellow. It is noteworthy that, while the trees exhibit but few species, the humbler plants present a very great number, both of species and genera.

— Clarence Edward Dutton

Tertiary History of the Grand Cañon District
U.S. Geological Survey Monograph 2 (1882), p. 133

INTRODUCTION

The Kaibab Plateau of northern Arizona is a treasure. Once (and occasionally still informally) called the Buckskin Mountains, the plateau is part of the traditional homeland of the Paiute peoples, who know it as (in translation here) the Mountain Lying Down. The broadly arched plateau lies more or less at 8,000 feet in elevation (the apex is over 9,200 feet). Its eastern and southern edges rise over Marble Canyon and Grand Canyon and its western edge looks over the Kanab Plateau, while on its northern side it slopes toward the Utah–Arizona boundary. From Le Fevre Overlook along that downgrade one can see on the horizon the start of the geological stair-stepping Grand Staircase ascending to the north in Utah. The Kaibab's structural geology is the stuff of textbooks, beyond the scope of this bibliography. But its ecology is a differently enthralling story. Unlike the canyons and plateaus that surround it, the Kaibab is heavily forested and set with open parklands that divulge karstic limestone areas that are the source of numerous springs in Marble and Grand Canyons.[2] Its stately ponderosa pines are home (and foodstuffs) to the Kaibab squirrel, found nowhere else on earth. Northern goshawks nest here, too, and have been the keen interest of environmental biologists for decades.

But the legacy that stands out is that of the deer—world-renowned as the "Kaibab deer" not because they are endemic to the plateau like the "Kaibab squirrel," but for the remarkable lesson in which these ordinary mule deer featured in the early 20th century, when their environment was astonishingly altered by humans out to "protect" them. A protracted effort was made with the consent—the insistence even—of federal forest agencies to eradicate the top-of-the-food-chain animals, specifically wolves and mountain lions, that preyed on the deer. They were decimated by hunters (one of them, "Uncle Jim" Owens, became famous for his "lion hunts"; a few general-writing citations about him and his clients are added to this bibliography). The deer population soon surged—an irruption is the biological term—to the point that they far

[2] Refer to Earle E. Spamer, *Groundwaters of the Grand Canyon Region, Arizona: A Research Bibliography* (Raven's Perch Media, 2024).

overgrazed their primary food plants; and then they too were decimated, by starvation. No less a figure than forester Aldo Leopold, exemplary and pioneering environmentalist and conservationist, said it was so.

Or so the lesson was told for decades. Later, biologists began to query the simplicity of predator–prey relationships in light of more broadly scoped ecological viewpoints that consider other impacts to the ecosystem, including wildfires. Some biologists (and game hunters) brand the lesson a myth. A (re)visionary biologist, Dan Binkley, countered the newer lessons, speculating that Leopold had been right after all. Such is the main pathway of science—accepting or rejecting postulates according to evidence or interpretations of data that support or refute a stated problem.

The "lesson of the Kaibab" has been a mainstay of environmental education for a century, thus it is worthwhile to present here a separate chronological bibliography of the Kaibab deer literature. With it, the lesson's historical track can be traced more easily through its publications, year by year, and from which an idea can also be grasped as to the lesson's international breadth of interest.

The Kaibab Plateau, a rich resource of fauna and flora, also has provided those who study the differences between lifeforms ("systematics," in their lingo) with many informative paths of inspection and discovery. It is one thing, though, to state that here is an abundance of animals and plants of many sorts that depend upon the plateau's montane environment, but another to realize that it has revealed to biologists a plethora of taxa that were recognizably new to science.[3] (The descriptions are referred to as "taxonomy.") The Native Americans who have lived in the region for millenia already knew many of these organisms through their presence or practical uses. But to those (mostly non-Natives) who scientifically study the skins and pressings of their trade many animals and plants were novel. Their work on the plateau is also summarized in this bibliography.

[3] See in Earle E. Spamer, *Bibliography and Annotated Checklist of Living Organisms First Named from the Grand Canyon and Vicinity (Northwestern Arizona)* (Raven's Perch Media, 2nd edition, 2024).

Physiographic outliers of the Kaibab Plateau are included in this bibliography because, for the want of a little less erosion through a topographic saddle that separates them from the main part of the plateau, they are not noticed as being any different from the whole plateau. These are Shiva Temple, Wotan's throne, and Powell Plateau, about which nevertheless a variety of environmentally focused publications have been separately produced. Regarding Shiva Temple specifically, there was the sensationally advertised 1937 expedition by New York's American Museum of Natural History that came to investigate the fauna that ostensibly had been "cut off" from the plateau "since the Ice Age." One or two overeager, paper-selling journalists even brought up the "d" word—dinosaurs. Alas, nothing sensational came from the expedition because there is, ecologically, nothing extraordinary about these outliers, recorded now for the most part by routine, mute skins and skeletons in museum drawers.

Environmentally, the Kaibab "buffalo" are a more recent surprise of a sort. While biologists and paleontologists offer data that indicate that bison had once been endemic to the region, these animals were not a part of the narrative when the "Kaibab deer" story came about. Yet now these bison are rather unwelcome on the plateau, in the Kaibab National Forest and the Grand Canyon National Park. They are the hybrid "beefalo" (or "cattalo" or "cattelo") descendants of an experiment of the early 20th century, when "Buffalo Jones" (Charles Jesse Jones) established a colony of his hybrid animals in the more plains-like House Rock Valley at the eastern foot of the Kaibab Plateau.[4] Widely known for his conservational efforts to preserve and restore the herds of the American bison, he also experimented with the husbandry of making a better-survivable cow by crossing bison with bovines. Even after Jones's time, the House Rock herd endured and, under the Arizona state's control were periodically open to hunting. In time, members of the herd wandered up the slope of what the geologists call the East Kaibab Monocline, and there found on top the sylvan land of the Kaibab. They stayed, reproduced, and became a problem to resource managers. Whether "indigenous" or not, their management called for culling or

[4] True bison, taxonomically and systematically speaking (and depending on how much taxonomic "splitting" or "lumping" one may adhere to), can, employing subgenus and subspecies, be written as *Bison (Bison) bison bison*; and since its common name is also "bison", the congruence of so many homographs may be unique in biology.

removing them, at least some of them, from the Kaibab. It is an ongoing issue, with "officially sanctioned" hunters awaiting and environmentalists decrying the hunts. Several "round-ups" have successfully been carried out, with the animals shipped to Native American bison sanctuary lands elsewhere.

In this bibliography, publications on Kaibab bison research and management are cited. And because the House Rock Valley experiment and later huntings are as much a part of the Kaibab's modern bison story, citations pertaining to the House Rock Valley herd are also included. Likewise, a few general-writing citations about "Buffalo Jones" will be found, too.

Yet the plateau environment is not all plant and animal censuses. It has been rife with wildfires over time; some of them, while destructive to lifeforms, beneficially provide the ecological openings for others. This is not unique to the Kaibab, of course, but the plateau's geographically contained area has provided wildfire environmentalists unique and well documented cases to study. And the administrative agencies who are tasked with controlling such fires—they once were vehemently anti-fire and unadvisedly squelched any and all flareups (recall Smokey Bear's admonishments of years past)—sometimes now even set controlled fires to reencourage the natural order of low-level beneficial fires. Their work on the plateau, too, also appears herein.

Omitted from this bibliography are publications that relate to the Arizona Strip on either side of the Kaibab Plateau (excepting the House Rock bison literature noted above).

Publications relating to the wide-ranging California Condor, and similarly to bats, are not considered here (unless they specifically mention the Kaibab Plateau) because these animals' ranges far exceed the limits of the plateau and various studies accordingly go far afield and may not particularly focus on the plateau.

The citations in this bibliography are extracted chiefly from Part 19 of the comprehensive bibliographical series, THE GRAND CANON, Volume 1/ Part A (Raven's Perch Media). That part also includes publications about broader ecological and environmental matters, embracing the greater Grand Canyon region. Also in the present bibliography are a few additional citations

culled from Part 2 in THE GRAND CANON (comprising more commonplace works). These additions are present for their pertinent stories about Kaibab Plateau ecology; for example, mountain lion hunting. ▪ ▪ ▪

BIBLIOGRAPHY & ANNOTATED CHECKLIST

of

LIVING ORGANISMS FIRST NAMED *from the* GRAND CANYON *and* VICINITY

(NORTHWESTERN ARIZONA)

SECOND EDITION

compiled and edited by

EARLE E. SPAMER

CHAPTER 22

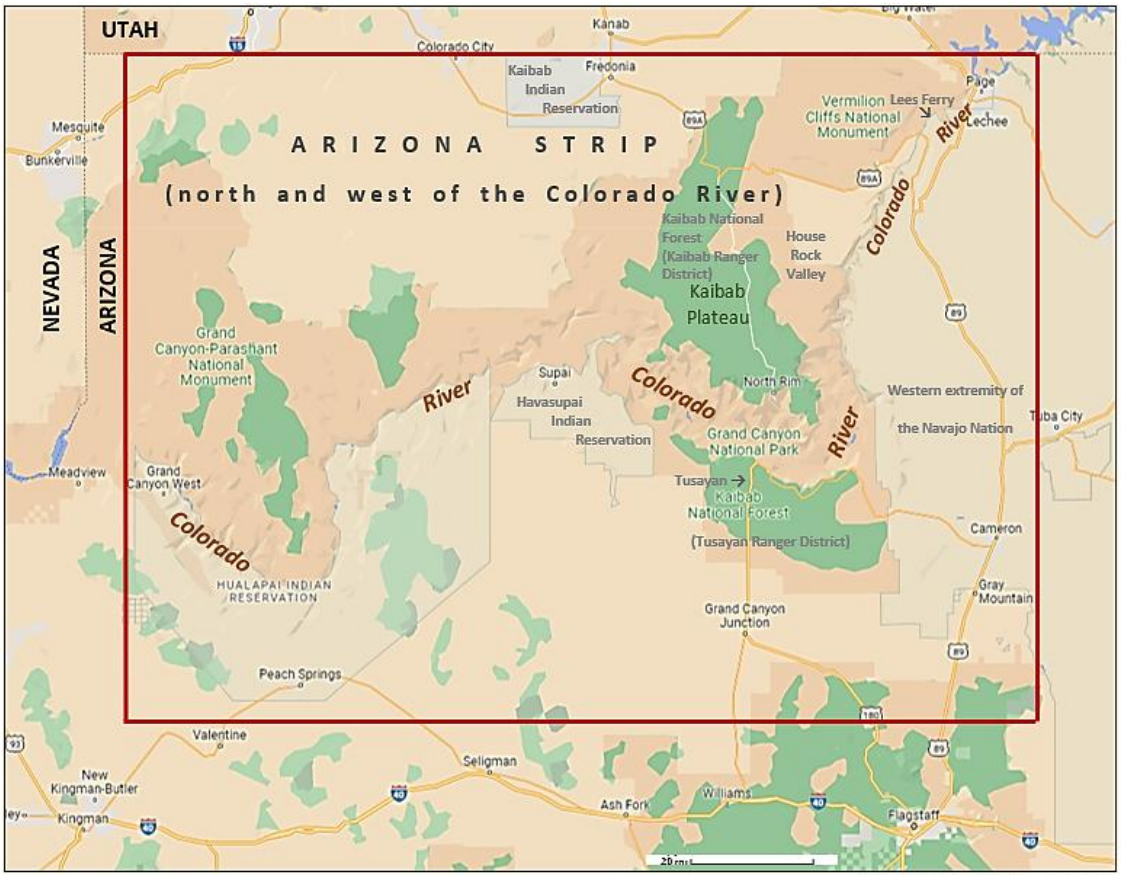
BIBLIOGRAPHY AND ANNOTATED CHECKLIST OF LIVING ORGANISMS FIRST NAMED FROM THE GRAND CANYON AND VICINITY (NORTHWESTERN ARIZONA)

(2ND EDITION 2025)[1]

COMPILED AND EDITED BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2024/10/Species-Checklist__2nd-edition.pdf (2.4 MB, 205 pp.)

APPROXIMATE AREA OF COVERAGE FOR THIS CHECKLIST



Base map from Google, emended

INTRODUCTION

This checklist provides federal and Native American resource managers and historians of the Grand Canyon region of northwestern Arizona with a census of living (neontological) organisms that had been scientifically named based on collections made wholly on, or in part from, the lands that these managers oversee. Their original scientific names are recorded in this checklist. It does not use updated or otherwise "current" names for taxa that have been scientifically reidentified (taxonomically synonymized) or that were systematically transfered to other supra-specific biological groups than those under which they were first named. Providing such information is beyond the scope of a historically- and administratively-directed document such as this one; its inclusion would soon make the records herein out of date. For the same reasons no data regarding the biological attributes (descriptions) of the organisms are included herein.

Federal administrative units to which this accounting may be of particular interest are:

U.S. Department of the Interior
National Park Service
Grand Canyon National Park
Glen Canyon National Recreation Area (in that area near where it shares a boundary with the Grand Canyon park at Lees Ferry)
Bureau of Land Management
Arizona Strip District
Joint management by NPS and BLM
Grand Canyon–Parashant National Monument
U.S. Department of Agriculture
U.S. Forest Service
Kaibab National Forest (Tusayan and North Kaibab Ranger Districts only)

Jurisdictions of Native American peoples addressed herein pertain to:

Havasupai Tribe [south side of the Grand Canyon]
Hualapai Indian Tribe [south side of the Grand Canyon]

Kaibab Band of Paiute Indians [on the Arizona Strip]
Navajo Nation [to the east of the Grand Canyon]

A few of the collections cited herein seem to have come from privately held lands that are inholdings within the federal units, and from within the boundaries of particular municipalities in Arizona.

The bibliography/checklist includes 334 species-level taxa[2] named on type specimens[3] collected in the greater Grand Canyon region of northwestern Arizona; 225 of those taxa are based at least in part on specimens from within, or are with good probability from within, the current boundaries of Grand Canyon National Park. Five taxonomic kingdoms are represented among them—animals, plants, fungi, photosynthetic eukaryotes, and protists. Only the name-bearing types from within the geographical boundaries of this checklist are listed; referred specimens (those not selected to be types) are generally omitted.

There is far more beyond the geographical boundaries imposed here that might still be considered to be in the greater Grand Canyon region, which are ignored for the simple reason that there must be a limit. For example, there is an equal wealth of taxonomic neology from the vast lands of the Navajo Nation, which does nudge briefly across this checklist's eastern boundary; that area is accommodated herein. Then there is the wholly different zoo and garden of the Mohave Desert to the west, which, while it is decisively segregated from the Grand Canyon region by physiography and environment, does in fact sneak into the western part of the canyon along the lower elevations of the Colorado River corridor; so a few taxa more representative of those regions are included here. This bibliography and checklist finds its origin in my own researches in history, science and bibliography of the Grand Canyon vicinity in particular, thus the geographical bounds are about the same.

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2 "Species-level taxon" means any name that is at the taxonomic rank of species, subspecies, or variety. [The count in the first edition included No. 244a, added late, thus it is the 322nd taxon overall. The second edition adds Nos. 323–334.]

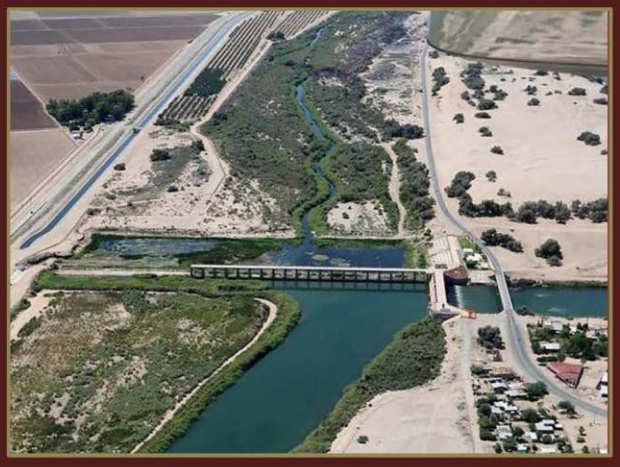
3 "Type specimens," more generally called "types", are the very specimens that were selected by a species-level taxon's author as bearing the formal characteristics that uniquely identify the taxon. There may be just one, or even hundreds, and they can be from different localities (even beyond the geographical area of interest in this checklist).

The checklist is also confined taxonomically to the *original names* of the organisms scientifically described for the first time by the authors cited in the bibliography. These names can disappear through taxonomic synonymy (and in many cases they have) when researchers in biological systematics have ascertained that one or another organism is actually the same as another, earlier named one, or if they move species-level taxa to different taxa than those in which they were originally placed. And in turn, genera can be forever "fiddled with", moving them from one Family to another and often carrying its contained species with it (though this explanation is a bit simplified); and similarly among the higher taxa, clear up to the Kingdom level. In some measure this is reflected in the higher-systematics listed with the taxa herein, which information may not be the same as that originally attributed by the authors of these taxa.

There is also a chance that some organisms can disappear actually, through extirpation or extinction; and this checklist thus would provide the original data that were communicated about their presence and scientific discovery. Ecological memory is ephemeral, but taxonomic memory—right, wrong, and revised—is forever, part of the resource manager's treasury. Thus this checklist serves these managers as a documentary list of organisms first named from the lands that they oversee and the resources that have been used; and it serves as a contribution to the history of the Grand Canyon and adjacent areas of northwestern Arizona. ▪ ▪ ▪

FIFTH EDITION

THE GRAND CANON



A Worldwide Bibliography of the Grand Canyon and Lower Colorado River

Regions in the United States & Mexico

VOLUME 1, PART B

BIBLIOGRAPHY

Earle E. Spamer

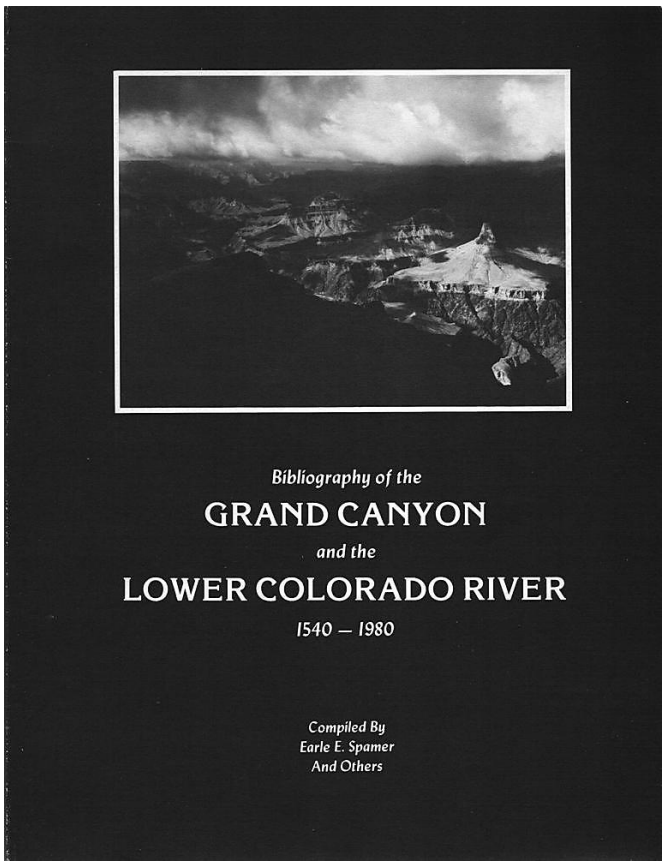
2025

CHAPTER 23

50 YEARS
SOME PERSONAL RECOLLECTIONS AND REFLECTIONS (2024)[1]

BY EARLE E. SPAMER

[1] https://ravensperch.org/wp-content/uploads/2024/09/50_YRS.pdf (313 KB, 13 pp.) [Text is reprinted in its entirety in *Introducing the Grand Canyon*.]



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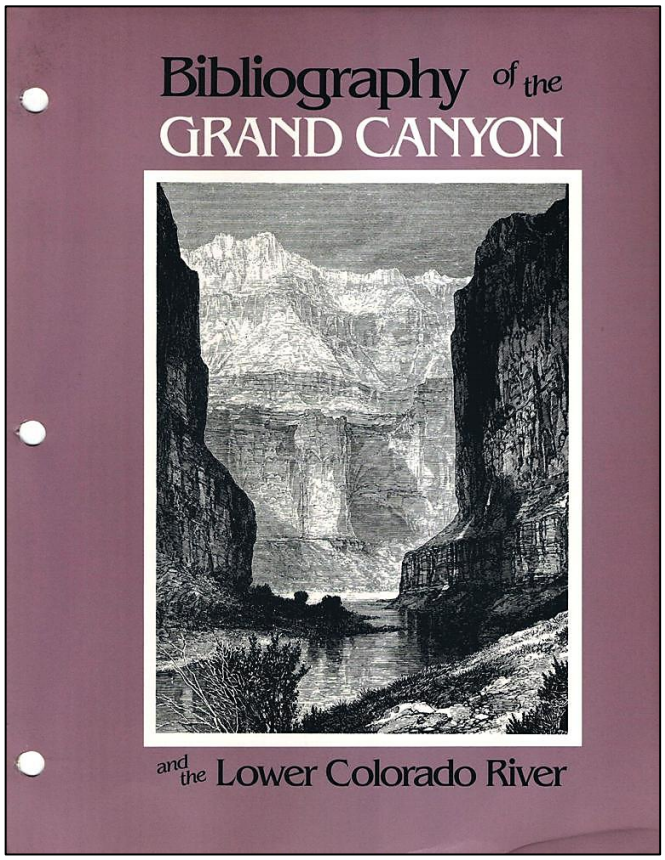

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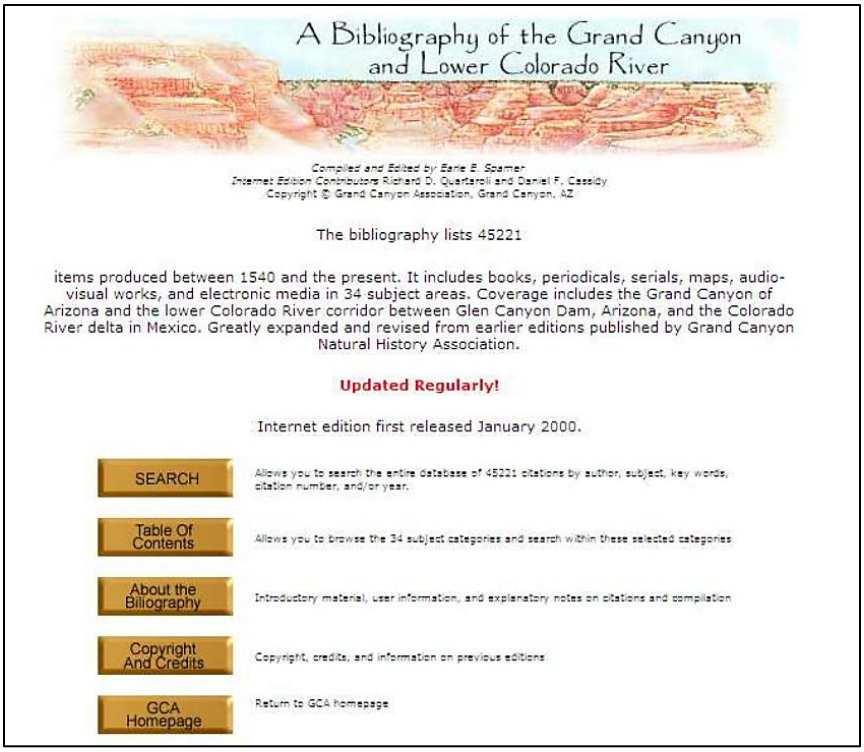
A Bibliography of the Grand Canyon and Lower Colorado River
Compiled and Edited by Earle E. Spamer
Internet Edition Contributors Richard D. Quartaroli and Daniel F. Cassidy
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The bibliography lists 45221
items produced between 1540 and the present. It includes books, periodicals, serials, maps, audio-visual works, and electronic media in 34 subject areas. Coverage includes the Grand Canyon of Arizona and the lower Colorado River corridor between Glen Canyon Dam, Arizona, and the Colorado River delta in Mexico. Greatly expanded and revised from earlier editions published by Grand Canyon Natural History Association.
Updated Regularly!
Internet edition first released January 2000.
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Table Of Contents
Allows you to browse the 34 subject categories and search within these selected categories
About the Bibliography
Introductory material, user information, and explanatory notes on citations and compilation
Copyright And Credits
Copyright, credits, and information on previous editions
GCA Homepage
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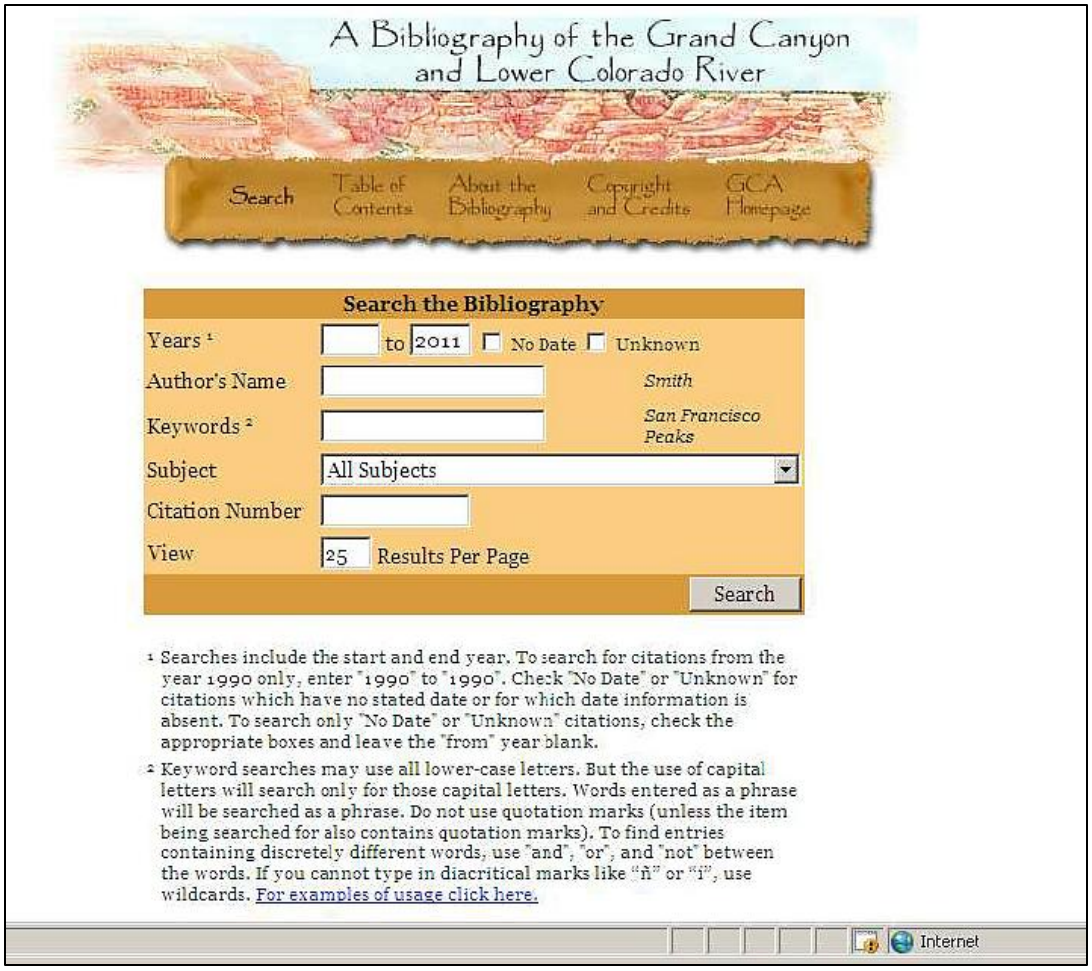
A Bibliography of the Grand Canyon and Lower Colorado River
Search
Table of Contents
About the Bibliography
Copyright and Credits
GCA Homepage
Search the Bibliography
Years [1]
to 2011
No Date
Unknown
Author's Name
Smith
Keywords [2]
San Francisco Peaks
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25
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[1] Searches include the start and end year. To search for citations from the year 1990 only, enter "1990" to "1990". Check "No Date" or "Unknown" for citations which have no stated date or for which date information is absent. To search only "No Date" or "Unknown" citations, check the appropriate boxes and leave the "from" year blank.
[2] Keyword searches may use all lower-case letters. But the use of capital letters will search only for those capital letters. Words entered as a phrase will be searched as a phrase. Do not use quotation marks (unless the item being searched for also contains quotation marks). To find entries containing discretely different words, use "and", "or", and "not" between the words. If you cannot type in diacritical marks like "ñ" or "i", use wildcards. For examples of usage click here.
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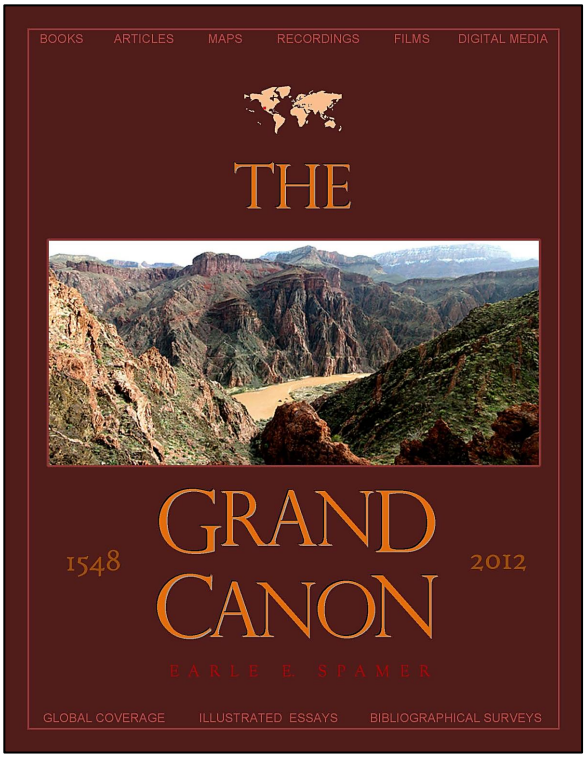

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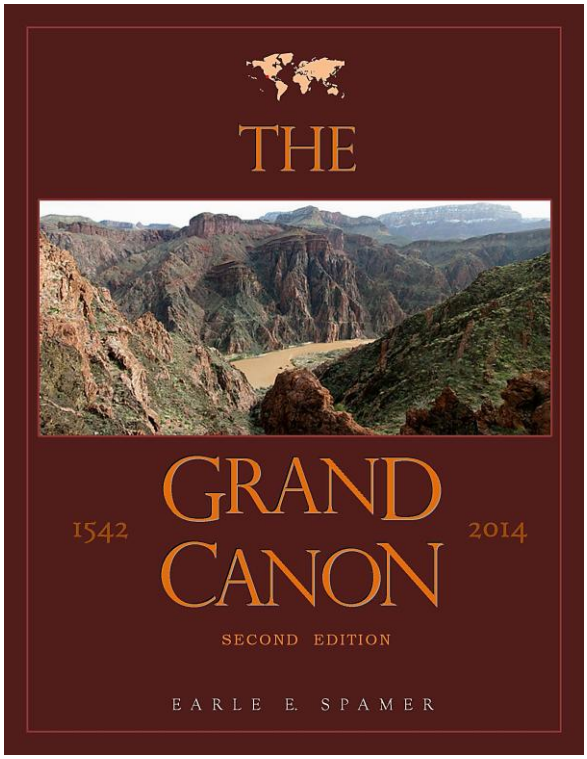

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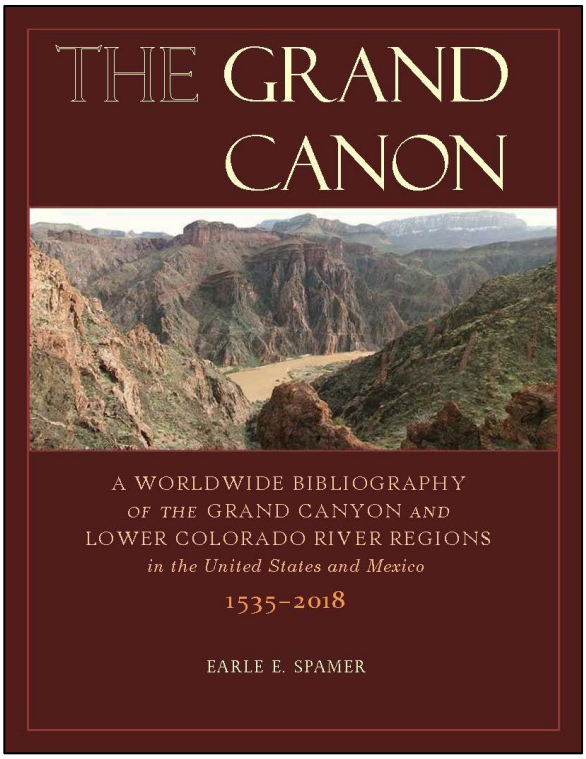

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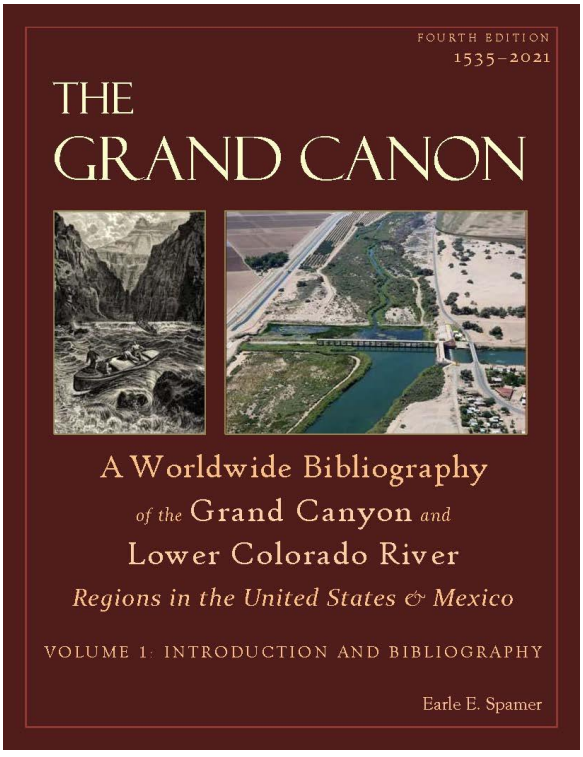


2022

★ 50 YEARS ★

Some Personal Recollections and Reflections

WHAT BEGAN in September 1974 as a bibliography of Grand Canyon geology went on to consume a good part of my life. It's been an interesting evolution.

The bibliography soon was all-encompassing, containing *everything* concerning the Grand Canyon *and* the Lower Colorado River country from Glen Canyon Dam to the sea. The ever-expanding volume appeared in paperback in 1981; in concomitant loose-leaf, microfiche, and digital disk versions in 1990 and 1993; as an interactive database online from 2000 to 2021; and as several ballooning editions of a book-format, searchable PDF first on CD and DVD disks (2012, 2015) then downloadable from a website (2019, 2022, and 2025, with liberal reproduction and fair use provisions to encourage its use and longevity). This personal essay follows the many lives of *Bibliography of the Grand Canyon and Lower Colorado River*, which now flourishes in multiple volumes as THE GRAND CANON.

The inspiration for this work came when I returned from my second trip to the Canyon. I had visited both rims that year (in May and August), including on this second trip a three-day hike to Phantom Ranch and back on the North Kaibab Trail, a drive to Point Sublime, and a night drive around through Jacob Lake and Cameron to a South Rim arrival after dawn. There I had purchased a copy of William J. Breed and Evelyn C. Roat's newly published *Geology of the Grand Canyon*, an early contribution to the large library I unsuspectingly was to collect. I thought it would be convenient to have a more comprehensive bibliography for Grand Canyon geology, so the book's own citation and selections from its cited references got it started.

I was beginning a second year studying geology at Rutgers University. While I had had a growing interest in "rocks" since middle childhood (the clambering on them was at first more interesting even while pretending to study them), this was my first immersion into the subject as a science. I had been more interested in astronomy and space exploration for a longer time (I'm still interested), but in the face of less-than-stellar math ability I was going to ground, as it were. And in the

previous year as a volunteer in the geology and paleontology department of the Academy of Natural Sciences of Philadelphia I had been exposed to a new thing—the annotated bibliography, which so fascinated me that I took up its methods. (Twelve years later I went to work in the Academy, remaining for 19 years in several collections-management and publications positions, concluding as the institution's archivist, then I was an archivist for 14 years in the American Philosophical Society's research library, also in Philadelphia.)

There had been "something about" the Grand Canyon that had attracted me for years, even before I had ever been there (nor did I know anyone who had, who might have regaled me with their experience). Now I had performed a geological rite of passage by hiking to the bottom and back—and the collision of place and print had occurred. I started with 4 × 6-inch index cards (ruled, yellow, purchased in a stationery store, which dates myself). Little did I realize what I was getting into. As one of the Academy's curators had recently explained to those who might think of being a registrar of things, "One does not simply sit down and prepare [a catalog]."[2] I found that it was necessary to occasionally catch more than the geology, and it became more than an occasional thing. I also learned that for sharper perspective I needed to go beyond the simple citation. So it began.

The Grand Canyon had become a consuming personal interest. I was, however, just one of a legion who admits to being enthralled with the Canyon and its river—and one of a fewer but unaccounted number who confesses obsession with them. Yet in the summer of 1974 I did not yet know of the players who had participated in the history of this place. They were beyond the geological world I was chasing, but I would soon enough catch up with them.

I sheepishly admit that on neither of my passes through Grand Canyon village that year did I know of Emery Kolb's "picture show," about his photo-run with brother Ellsworth down the Colorado in 1911–12. The film is said to be the longest-running film ever, until Emery's death in 1976.[3] My limited rimside wanderings did

[2] Edmond V. Malnate, "A catalog of primary types in the herpetological collections of the Academy of Natural Sciences, Philadelphia (ANSP)", *Academy of Natural Sciences of Philadelphia, Proceedings*, Vol. 123 (1971), p. 345.

[3] The film, not titled and variously edited over the years, adds views from the Kolbs' other canyon explorations. It was first shown on national tour, then for more than 60 years at the Kolb Studio on the

not pass by Kolb Studio. I was camping and did not spend much time in the commercial part of the village. Two years later Emery died, aged 94, before I could return to the Canyon. When I did, the studio was shuttered and empty, though in a chance encounter with a kindly ranger with a key I was shown around, and he gave me one of Emery's left-over advertising cards. I missed out on the Emery Kolb experience but felt his presence while I peered through the window from where he had photographed thousands of tourists lined up for their mounted start down the Bright Angel Trail. I was on a mule there once, too, but there was no photographer in the days after Mr. Kolb; no historical remark, no pause either. We just plodded past the studio and on down the trail. Cloppity clop; it was my first experience mounted on a large animal. It was wonderful. Somehow I wound up with a cabin to myself at Phantom Ranch. I spent the free afternoon retracing my steps along Bright Angel Creek and made a short exploration up narrow Phantom Creek. These were my Academy days, and I used the time to continue a bit of research into the distribution of the living mollusks of the Canyon.

The chase I was on was leading me virtually around the world. At first this was exclusively along the shelves and on the tables of libraries and bookstores. Decades later I was surfing the electronic waves of the web. It's one thing to (as I would) occasionally hike and boat there, or fly over the Canyon (and into it, as one once could), or to wander the rims, or sit with a drink watching the scene as a guest at El Tovar or Grand Canyon Lodge; but it's quite another thing to be one of those people who spends a lifetime exploring the Colorado's riverlands through what has been published about them (around the world, no less), to read about livelihoods, impressions, and goings-on. Then in my case particularly, I wound up being one of those contributing authors and editors—from historical bits to scientific studies—all the while being a basic bibliographer chasing down everyone else's work.

Bibliographies entered my life avocationally and professionally. For Grand Canyon it was a passion of unrestrained fascination and an eagerness for more, further fueled by indulgent perseverance. It wasn't just the "who–what–where–when" of publication but more fully their places in the history of the Canyon and

South Rim, as often as four times a day. Emery narrated it himself before audiences in the studio auditorium, but in his later years, after introducing it, resorted to a recording. It can be viewed online at https://archive.library.nau.edu/digital/collection/cpa/id/61149/ (last accessed April 13, 2025).

how they were received. I knew others might be interested in those things so I had to find all I could—not just books but articles, and films, and so on, and on. The motivating purpose was of course to make the consolidated information available. The underlying purpose was to ensure that everything possible was gathered before these items, flung wide in time and place, vanished in the slipstreams of barely noticed or outdated publications or were dimmed by unfashionable interests, changed historical perspectives, and fickle technologies. Fifty years on, I am little closer to a finish than when I began, so it must outrun my life. To perchance quote the person who first ever saw the Grand Canyon, "Damn." [4]

★

THE BIBLIOGRAPHY was supposed to be restricted to the Canyon. It would have been so much easier had I just stuck with that. But the Canyon is not just the chasm; it is its lands 'round about, and the people there, and all the things that they did and all the things that they discovered and all the things that others gained from their presence and activities—everything. This embraces five centuries of Western incursions, which is nothing compared to Indigenous Peoples' presence from time immemorial. Where to turn first? One learns patience; the method will evolve.

The vast Canyon has a river, which neither heads nor ends there. As I followed its course the area of interest lengthened and broadened to encompass the entire Lower Colorado River country, from Glen Canyon Dam to and into the Gulf of California. It was all about historical, cultural, ethnological, and academic activities along this stream, on its surrounding lands, by all of its peoples, Native and infiltrators alike. Then, to be sure to embrace all the ways the Colorado affects this region, I saw that the bibliography's coverage also had to run off to the West, following a wayward river into the Salton Sink and the Imperial–Mexicali valley that spans the international boundary. All the subjects as which I was chasing for the Grand Canyon country had to be there, too, with some new ones like agriculture, horticulture, husbandry, irrigation, farm laborers' rights, and trans-boundary water use and sanitation.

[4] "I pictured the predicament of the first man who ever saw that Canyon [. . .] I'll bet he said 'Damn.' " Chester Theodore Crowell, " 'Straight down to China', a tale of mules and thrills in the Grand Canyon of Arizona", *The Independent* (New York), Vol. 105 (June 4, 1921), p. 602.

So then, why is Glen Canyon Dam a bibliographical barrier? Where's the Colorado's Upper Basin in this bibliography? As one follows the river's course upstream from the dam, it branches again and again. Substantially large and mostly inhabited tributary basins come together, and as one parts from the Colorado Plateau and reaches into the Rocky Mountains there are large tributaries to them in turn—in all, many more in number and more widely dispersed than which are found along the desert journey up from the gulf through the Grand Canyon. Each branch spins its own carrousel of cultural, ethnological, historical, and academic influences. I would have started too late to confidently chase all that, so far from the Grand Canyon without a connection like the Colorado in the Salton Sink. Besides, my own personal experiences, travels, and book-buying and reading have not ventured much into Utah, Colorado, and Wyoming even though I've set foot in all of the Lower Forty-Eight. Neither have I have earnestly joined with others who know a lot about these fascinating rivers and lands and who have lived lives there. I am continually amazed to hear the stories and questions and answers about the places and goings-on in the Upper Basin; there's just so much going on up there. But that's for another lifetime; not mine, now.

I have had it relatively easy because downstream from Glen Canyon the Colorado picks up few significant tributaries. I give a little bit of bibliographical lip service to the Paria River. All but the encanyoned portion of the Little Colorado River where it becomes an arm of the Grand Canyon, and all but the confluent portions of the Virgin, Bill Williams, and Gila Rivers, are beyond the scope of this work. I run with and browse alongside the main river without the distraction of having to follow its big tributaries far up to learn their own involved histories in print. It was difficult enough for me to tail the Colorado on its occasional natural and accidental breakouts to refill the Salton Sea and thus to swell the bibliography with all the natural and human histories down there. (Frankly, had I known in advance of all the ancillary history on the whole Lower Colorado below Grand Canyon, I would have stuck with the Canyon. But here I am, fifty years on.)

Thematically, my intended bibliography of "just Grand Canyon geology" flared from one shining point into a supergiant star, swelling and engulfing other bibliographies and indices, and commonplace works, and the entire run of the *The New York Times*, and obituaries and memorials, and works for people with

impairments, and works by and for young people, and fiction, and verse, and travel, and river guides, and administrative affairs, and social works of all kinds, and health and safety, and archaeology and cultural resources and preservation, and Native American peoples' activities and concerns, and the physical environment, and biology and ecology, and the earth sciences, and audio-visual works, and audio works and musical scores, and lone images in print, and computer and interactive media, and reviews of publications and products, and a newspaper guide, and marginalia (explained, which is better than the murky "Miscellaneous" rag bag usually resorted to)—and to this add voluminous introductory notes and essays, and an entire volume devoted to maps of six centuries with chorographical notes and illustrated textual commentaries, and a third volume about all the other Grand Canyons of this and other worlds with all the Grand Canyon analogies, metaphors, euphemisms, and similes that I could find!

Fascination, indulgence, obsession. Patience. I was asked by more than one person how I did it. I replied, surely unsatisfactorily, "you just take the time."

★

IN THE LATE '90s I wanted to change the informative but starchy and lackluster title, "*Bibliography of—*", to "*The Grand Canon*" and demote the otherwise informative "B" word to a subtitle. "Bibliography" is a word that is an effective repellent to those who might disdain pedagogic productions, so I sought an attention-grabber. THE GRAND CANON was for the play on words, too—*canon* (pronounced like "cannon") versus *canon* (pronounced "canyon"). The latter was for a long time a widely used typographical fallback that, with "Grand Canon" and other "canons," ignored the cedilla of the original Spanish *cañon*. I saw the overall work as *a* canon. Since there was nothing else like it, I hoped that I could thus escape the uncomfortable brand of conceit that rises among competitors. A canon offers essential guidance, counsel, or support, one definitive or recognized for its authority. It's a shame that ecclesiastical communities have so elevated the word "canon" that it's now difficult to encounter or appreciate its etymological variant meanings beyond those of spiritual concerns. But I retrieve canon's other-worldly connotations, even if they are pedestrian compared to canons of scripture and clerics.

Starting in 2000 the bibliography was now going to be an online database rather than a monographic bibliography in print. This was something new and exciting—which I could update as frequently as was necessary—thanks to the foresight of the Grand Canyon Association (today the Grand Canyon Conservancy), which as its forerunner the Grand Canyon Natural History Association had published the two print editions of 1981 and 1990. I had envisioned a grand roll-out on a CD disk, but that idea exposed my technologically short vision. When the online database did arrive, it was aboard its own URL, grandcanyonbiblio.org, which ran with the Association's own grandcanyon.org. The Association linked to it from its website and announced it with spiffy, colorful postcards. The clear focus was the Grand Canyon. Even in my own mind, I confess, the "Lower Colorado River" remained kind of an afterthought to the Canyon, though that content of the bibliography rapidly succumbed to comparable concentration. I was nevertheless dissuaded from using what I thought was a more resounding title, "THE GRAND CANON" by a more sensible publications manager who was mindful that users might not be so etymologically in the know, so it remained (ho hum) the "*Bibliography of—*".

In time, I realized that the technology being used to drive the database was faltering, that the database probably was not going to survive. If it did fold, there would be nothing in its place except the very outdated print monographs—with all the additions and emendations to them vaporized. ColdFusion was the culprit, the software power behind the bibliography, which I had nothing to do with. I limped along with the problems for several years using a program developed for me years earlier to upload new sets of citations and batches of corrections or deletions, emailing for help whenever the operation crashed the database, which it did more and more frequently. The database was grand, but groaning. Conscious about what might seize up the site, I avoided some things, particularly the act of deleting multiple citations at once. The program, once capable of handling that, could not do it except impractically one deletion at a time with a time-consuming complete refresh after each. The fixed glitches in the software would recur on some future uploads, too. "Why" was was both beyond me and not my job to find out. I was finally stopped cold when staying in touch with a third-party technology person had

become dodgy. After one too many crashes and near non-resurrections of the database, I drew the line.

The "Internet Edition" had had a fifteen year run—a damned good run at that, growing since 2000 by about 50,000 citations and probably even more edits. Then it was inert, usable but no longer updated, until 2021 when the plug was pulled. By that time, the Grand Canyon Conservancy's newer staff had not known of the bibliography that had been under their wing for 40 years, or for that matter that I was the person behind it. The 21st century and its brief moments of social media were in full swing; the boundlessly useful but intellectually staid series of ample "Monographs" was something for "dusty" library shelves. (Little will raise the ire of a librarian or an archivist more than to call their collections "dusty"; it's a favorite, though ill-advised, term among journalists.) Times change. Onward, but don't forget!

The demise of the database was a relief to me, actually. I knew that it was being used, but I also was keenly aware that the bibliography in my hands was now far larger, more correct, and as a whole more reliable than the constellation of data fields online. Fortunately, ten years earlier I had begun to restore the monographic presentation of the bibliography. This at last was THE GRAND CANON. While the online database still existed, I produced the first two editions (2012, 2015) as PDF-formatted, searchable book-like presentations on CD and DVD disks, for those who preferred to use a "whole" bibliography that looked like one and not rely simply on cursory "returns" from database queries that might or might not be structured sufficiently. Its only real problem was that the monograph was now *really huge*, but I could not see abandoning it in favor of a database that effectively made the whole invisible. To help avoid the *hugeness* problem, and to help individual users who might not be interested in "the whole" anyway, I planned to make the bibliography's 32 individual parts also separately available.

Late in 2018 I was about to retire from decades of museum-collections work and occupations in libraries and archives, so I prepared the Raven's Perch Media website with its tidy URL, https://ravensperch.org. It was to be the home of THE GRAND CANON but it soon grew into a source for other bibliographical and historical products that pertain to the Grand Canyon and the Lower Colorado River. In 2019, the third edition made its entrance as a PDF on the new website—the whole bibliog-

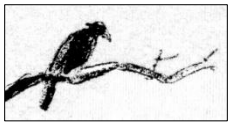
raphy *plus* its 32 individual parts (and then some). In 2022, a fourth edition was posted online, now expanded to three volumes—Volume 2 was a separate *Cartobibliography* and Volume 3, *Grand Canyon: Colossal Mirror*, was created from what before had been a simple appendix devoted to other named "Grand Canyons" of the world and other worlds and a full complement of analogies, metaphors, euphemisms, and similes that use the term "Grand Canyon."

It was apparent to me that the main bibliography, despite being already divided into numerous topically arranged parts, should be further parsed into reference works to be useful to specific groups of people. For example, the biology and ecology citations, grouped in one part, could be used to produce discrete bibliographies on the many subdisciplines represented among them—ornithology, ichthyology, and botany for starters. I also devised separate historical bibliographies for Native Americans (arranged by tribe), administrative affairs (reorganized by agency and unit), and the historical Hoover Dam (alone), and still more compilations for people who are specially interested in topics that are too specific to reasonably segregate as main parts of THE GRAND CANON.

Raven's Perch also includes historical overviews, on research topics that had not been tapped before. My favored example, if I may promote it before other Raven's Perch products, is an account of the run up the Colorado River in 1858 by the expedition under Lt. Joseph C. Ives aboard a purpose-built little steamboat, *Explorer*. Whereas the trip and its events are widely known, this historical look was as seen from the perspective of the steamboat's engineer, Andrew J. Carroll. For 160 years all we knew was that he was "A. J. Carroll of Philadelphia," that he likely worked for the Philadelphia firm that built the iron and wood steamer—and that was it. Here he came more to light as witnessed in the published journals of two of the expedition's principal members, Lt. Ives and (in translation from the German) Balduin Möllhausen, because Carroll left no record of his own. I also chased the phantom engineer to his Irish and Philadelphia origins, found his given name, and trailed his journey West with the steamboat kit, where on the Colorado he earned the sobriquet "Captain Iron" from his expedition mates. He is now a person alive.

As for the raven, I am infatuated by these mischievous marvels of the bird realm. They may be "nuisances" to some people, but Native Americans find the bird's trickery and play useful for teaching cultural legacies and moral tales. I've

watched them on river trips, sneaking into camp at dawn to shop around the sleeping owners of unsecured edible and attractive things, or swooping in to police the beach sands when the boats finally left camp. From a room at El Tovar Hotel I watched one arrive quietly to a chair back on the porch, scrutinize a salad plate-sized breakfast Danish, skid a few times while stretching one leg onto a glass table to lean way in to steal it, and fly off with it to a tree where he (or she) advertised the feat with pride.



The Raven's Perch logo itself comes from the aforementioned nineteenth century adventurer, naturalist, and artist Balduin Möllhausen. He painted an Ives expedition camp scene from 1858 near Grand Canyon that incorporated a watchful raven atop a dead tree. The view was transformed into a lithograph for publication in Lt. Ives' official report in 1861, published as a U.S. Congressional document, from which I cropped the perched raven. I wonder what Möllhausen would think of my purpose (much less the technology I used) to, raven-like, grab from his artwork. *Danke, gnädiger Herr.* Some years later, while working on a translation of Möllhausen's account of the expedition's overland venture between the Colorado River and the Grand Canyon—another Raven's Perch product—I was delighted to discover that he had written about that very scene. Möllhausen, himself perched in a nearby tree, recalled, "a couple of ravens croaked morosely on the bare branches of a dried-up fir tree as they waited impatiently for our departure, so that they could scout around the abandoned campsite for fat morsels." [5]

I know that the Raven's Perch website will disappear eventually—"Nevermore" to Poe's ear—but its essential contents, designed as downloadable PDF books rather than as shape-shifting web pages, have a better chance of surviving, and, perhaps, they may even have been printed out. Elsewhere I've referred to such material as "light gray literature," the flotsam of items downloaded or printed from websites that may no longer exist.[6] But frankly, despite my embrace

[5] In translation here. [See also the Colophon herein, on the last page.] Möllhausen's original watercolor painting is now in the Amon Carter Museum of American Art (Fort Worth, Texas); it is digitized online at https://www.cartermuseum.org/collection/character-high-table-lands-1988146 (last accessed April 13, 2025).

[6] Earle E. Spamer, "What a woven web: Archives, websites, and the coming legacy of 'light gray literature.'" *Provenance*, Vol. 20 (2004 [for 2002]), pp. 59-71.

of the technological world and faith that it will exist and grow in unimaginable leaps if civilization continues, I am unable to imagine what the content of today's digital world will be like even a century hence; or for that matter, how humans (and their technological assistants or overseers?) will interact with the things that we have today. If anything, that world must accommodate legacy and perpetuating paper libraries and digital resources alike; human history is just too rich and too long to forego the former. One might imagine that Leonardo da Vinci or Benjamin Franklin would approve of today's world were they to wake up in it. Would they—and we—feel the same in five centuries more? (If you are taken aback trying to comprehend the year "2525" consider that the view backward to 1525, being history rather than future, seems not to be so unimaginable.)

Bibliographies are, frankly, largely uninteresting to a readership who may not be comfortable with such clinical tools, and to publishers they are almost wholly uneconomical. One may complain that no one "reads" a bibliography. But in the preface to the 4th Edition of THE GRAND CANON I first presented my case that one *can* and *should* sometimes treat a bibliography as reading material. Bibliographies are *not* simply a look-up tool. They can be mined; they can inspire, and they can draw attention to what might not be so noticeable. They can re-present things from it in new formats and contexts for different users. But it takes a *reader* to make this happen.

I envision applications of what euphemistically is called Artificial Intelligence (AI), by which the raw data of a bibliography might be stretched, dissected, analyzed, and rejiggered to draw out new presentations and analyses that deliver data in modified ways, for different audiences, or perhaps even in ways not now imaginable (although AI's somewhat knotty debut reveals some untrustworthiness). But in this special case it all has to depend first on that raw source, the bibliography, which even can convey data through special typographies, not to overlook the mixed use of non-Roman orthographies and citations in multiple languages. It's not all text-only like in a database; typography and language deliver information, too. Then if there are annotations, these too have to be analyzed in context with the citation. I present these as challenges for AI. I hope people will try it out. More to the point, I hope that people will agree that bibliographies *are* more than lists and will use that concept to advantage, for uses and people not yet known.

★

SO THAT'S WHERE WE ARE, fifty years along, on the cusp of paper scholarship and digital analytics. The contrast of techniques and products within one adult's lifetime (mine) is astonishing. My methods at first were basic, something someone from a century earlier would recognize. All that I had intended was a conventional bibliography, a fairly unremarkable where-to-go-to record of citations—author, date, title, source, period. I even began blind-sided by the "traditional" scholarly form of citation to which I had been introduced by reading scientific journals, using only initials for authors' given names, and employing sometimes-mysteriously abbreviated serial titles. Readers might not appreciate H. Berg who in 1907 helpfully cited *Österr. Z. f. B. u. H.* He accepted that those in the know would understand that he referred to *Österreichisch Zeitschrift für Berg- und Hüttenwesen* (Austrian Journal of Mining and Metallurgy)! Abbreviated citations are the residue of vintage presumptuous scholarship and hand-typesetting short-cuts. There's no master list of "accepted" abbreviations for serial titles anyway, even though various disciplines have offered their own—differing—lists for authors to follow. By the time that my second edition came around I had gotten all that out of my system. I used people's given names wherever possible and spelled out all serial titles in full, to help users who might need the complete information.

I captured information on pieces of paper, standing at library shelves, sitting cross-legged on the floor in the aisles, or finding an empty table to spread out upon. Often I stood awkwardly in book stores, juggling a book or a magazine, scribbling a citation for something I did not or could not buy. Then (this being the twentieth century) I stood at xerox machines of all brands and abilities, copying thousands upon thousands of pages over the years; some of it for free (actually or surreptitiously), otherwise rolling coins into those machines that gobbled them up as cheaply as five or ten cents per page (I would get rolls of quarters from the bank—something else that dates me). I don't think I once destroyed a spine or shattered a brittle, acidic page (some library patrons are careful). Many of these citation–captures would eventually also append annotations and explanatory notes. That need grew in tandem with other work, as I also compiled eight annotated bibliographies and reference lists of Grand Canyon geology and paleontology that were published 1982–1992 by the Geological Society of America in the economical, less

user-friendly medium of microfiche (all of which in a quarter century GSA would scan for commercial digital re-release as PDFs).

In those days software wasn't much of a consideration. It was pretty basic for word-processing and not yet very widely available; for non-numerical data it was not expected to be analytical by itself. In fact, the manuscript for the first version of the bibliography was prepared before I ever owned a computer [7] (this was published in 1981, a paperback with a solid black cover, not my choice, but it was dressed up by an artistically moody black-and-white photograph of Canyon weather). I rolled paper through a typewriter, with a carbon copy (maybe two, I don't recall) for assurance against loss or another use. It was to be the second in the Grand Canyon Natural History Association's "Monographs" series. A typesetter somewhere retyped the darned thing—what a tedious, probably boring job that must have been. Galleys (look it up) were made for proofing, which, mailed to me, I read yet again and marked up with a pen.

The second edition (1990) was an improvement—enter software. I owned a computer now and had access to a laser printer (later I would own one of these, too), so I created the pages myself (I used WordPerfect in those days), which were used as so-called "camera-ready copy" for offset printing. This time around I also included essays, some of them requested from authors in various fields to go along with the corresponding part of the bibliography. It even won second prize in a contest of publications from National Park Service cooperating associations; not bad for *a bibliography*! The volume was produced as a loose-leaf binder ("metallic mauve" was not my choice of color but at least it too included an illustration). This theoretically allowed for updates such as its 1993 supplement (that promptly filled the binder, so that was that). The pages were also photo-imaged for microfiche (one of those things, supposedly more convenient than microfilm, that was going to change how researchers and librarians did things but who just tolerated it). In addition, the text-only keystrokes—devoid of informational niceties like italics and introducing goofs where characters with diacritical marks and other symbols were digitally misunderstood—were borrowed to distribute the bibliography on digital

[7] Personal computers were only just then appearing on the market. Ironically, at that time I worked as an editor for a firm that published frequently updated computer-technology reports. For quite a while we wrote our reports on typewriters, and typesetters retyped it all for publication.

disks ("floppies," so-called then, the flexible 5¼-inch variety), another progressive idea that circled down the drain. In use the digital bytes were monotonized by monochrome CRT displays (look it up). I personally migrated a few of the disks on request, to the later non-flexible 3½-inch containerized disks (defiantly still called floppies), which was more drainware.

The database version of the bibliography began when I submitted my word-processed master file to the Grand Canyon Association in 1999—by mail, on a floppy. Someone was hired to finagle the format into data fields that became the database; and the user end of things was created by technology people for interaction on the web. Thereafter I uploaded corrections and updates through software that was readied for me, which as I said worked for a while but after fifteen years didn't work so well. (Ah, well!) I don't rely so heavily on others now, with a bit less technological sophistication and yet hopefully with some measure of approbation. At least THE GRAND CANON, all of it, is there for all. [8]

★

THE GRAND CANON is a time capsule. Here is a lot of stuff—111,000 citations—that people have produced about the Grand Canyon, the Colorado River, and the lands all around it. So *rely* on the bibliography. Take the time. *Read it*, even. One might scoff that one may as well read a dictionary, but by looking through these pages, even if not on a hunt for anything specific, what catches your eye? Users might predictably jump to the names of the nobles and familiars of Grand Canyon and Colorado River history—but that's too easy; one knows them, knows what will be found, and would be surprised to not find them. Then again, maybe there will be a few newish details to go along with those works. Or, more telling, a citation *nearby*, like browsing a library or bookstore shelf, may alert one to something different but equally and productively interesting. Then there are people and publications that may be peculiar. Go and see. A database would return what is expected or hoped for; a reader recognizes the intriguing and discovers the unexpected.

THE GRAND CANON is a tour guide. It tells of things in the babble of 115 languages from Afghanistan to Zimbabwe: people, places, sounds, sights, smells, tastes, narratives, chronicles, memoirs, findings, reports, anecdotes, tales, fibs,

[8] [See herein the front matter section, "Raven's Perch Media Website."]

statements, lessons, discoveries, debunkings, summaries, sermons, legends, poems, opinions, laws, rumors, announcements, pronouncements, speculations, assertions, dogmas, suggestions, novelties, resolutions, decrees, repetitions, petitions, pleas, beliefs and aliefs, truths and falsities (depending upon the writer or the reader); all presented in books, booklets, serials, pamphlets, maps, musical scores, transparencies (which include movies of the celluloid type), records (the kind for phonographs, but also the kind that are paper and photographic), and bytes (invisible, but they generate things that we humans can engage). Experiencing, sharing, and cultivating these citations is the reward of *reading* a bibliography. If one obtains the items, their thousands of points condensed therein will be disclosed. If you do embark on a reading, the perspective of the citations will with time very likely wondrously change when they are re-read as we, too, and the world around us, age.

Read! Explore! Often!

— EARLE SPAMER
pronounced sp*a*h-mer [9]

▪ ▪ ▪

[9] Not only is this note a matter of family respect, but after my time the name is bound to be uncorrectably mispronounced. It retains the German back vowel "*a*" as in "sp*a*" or "f*a*ther"; it is not "spammer" nor "spaymer" although in England at least the latter is preferred by some Spamers there. Further, in this current age that plays a mostly unwilling host to digital "spam", a pejorative term, I have experienced a novel form of cultural censure. My email messages may be robotically rejected due to a mistaken connotation with "spammer", sometimes misspelled "spamer" (though why a true spammer would advertise themself openly is beyond me). In 2004, my peculiarly personal plight was brought up by name at the end of an information technology syndicated column (Reid Goldsborough, "Prevent Spam Filters From Blocking Legitimate e-mail," in *Personal Computing* syndicated in electronic and print media, October 29, 2004). (An online-readable text of this article was located more recently, August 20, 2024: https://www.diverseeducation.com/home/article/15080306/prevent-spam-filters-from-blocking-legitimate-e-mail; last accessed April 13, 2025.)

APPENDIX

EDITIONS OF THE GRAND CANYON–LOWER COLORADO RIVER BIBLIOGRAPHY [1]

[1] Reproduced from THE GRAND CANON, Volume 1, Part A, pp. xxxvii–xliii.

EDITIONS OF THE GRAND CANYON–LOWER COLORADO RIVER BIBLIOGRAPHY

HISTORICAL BACKGROUND

THE GRAND CANYON–LOWER COLORADO RIVER BIBLIOGRAPHY appeared first in two inkprint editions (1981 and 1990, with a 1993 supplement) published by the Grand Canyon Natural History Association. The 1990/1993 releases were also produced on microfiche and as digital (text-only ASCII format) files on 5¼-inch diskettes ("floppies").

In January 2000 a greatly revised Internet Edition was posted as a field-searchable database on the website of the (renamed) Grand Canyon Association but under its own domain name (www.grandcanyonbiblio.org), presenting wholly revised work that had been completed in September 1999. Updates to the Internet Edition were made frequently until mid-2015, when technological issues precluded updating the database. It was removed in October 2021.

Preparation of THE GRAND CANON began in 2010. The object was to restore the monographic presentation of the entire bibliography and to incorporate features not present in the Internet Edition, particularly the use of non-Roman orthographies. The first edition of THE GRAND CANON was released in 2012; a second edition in 2015 commemorated the 40th anniversary of the Grand Canyon–Lower Colorado River bibliography project; a third edition, 2019, commemorated the centennial of Grand Canyon National Park and the sesquicentennial of John Wesley Powell's first Colorado River expedition. The fourth edition, 2022, reflected the transfer of Part 25 to become Volume 2 of THE GRAND CANON, *Cartobibliography of the Grand Canyon and Lower Colorado River Regions*; and what

had been an appended document, *Grand Canyon, Colossal Mirror*, is now Volume 3. The fifth edition, 2025, continues to expand and enlarge the bibliographies and now separates the lengthy Introduction and other front matter (Volume 1, Part A) from the main Bibliography (Volume 1, Part B), which was done to make the volume more user-friendly and to limit the amount of space each component occupies in online storage and reduces download file sizes.

See the beginning of Chapter 23 for cover images of these editions.

Editions of the Grand Canyon–Lower Colorado River Bibliography

[precise titling is shown]

Print, fiche, and ASCII-format digital editions 1981– 1993

1981 **Bibliography of the Grand Canyon and the Lower Colorado River, 1540-1980.**

Earle E. Spamer, compiler (WITH CONTRIBUTORS George H. Billingsley, William J. Breed, Robert C. Euler, and Grace Keroher)

Grand Canyon, Arizona: Grand Canyon Natural History Association, *Monograph 2*, 119 pp.

ISBN 0-938216-14-7, Library of Congress Number 81-81457

Arranged in 10 parts. Print format only, paper wraps, perfect-bound.

[See Appendix A to Part 1 in THE GRAND CANON Volume 1/Part B for contents and arrangement of the 1981 edition.]

[The bibliography was begun in September 1974. Later editions are reorganized and reformatted.]

1990 **Bibliography of the Grand Canyon and the Lower Colorado River; from 1540. SECOND EDITION.**

Earle E. Spamer, compiler (WITH CONTRIBUTORS George H. Billingsley, William J. Breed, Robert C. Euler, Louise M. Hinchliffe, Dorothy A. House, Grace Keroher, Valerie Meyer, Richard Quartaroli, and Lawrence E. Stevens)

Grand Canyon, Arizona: Grand Canyon Natural History Association, *Monograph 8*, 12 separately paginated sections, with separately paginated front matter, in one volume, [370 pp.]

ISBN 0-938216-37-6, Library of Congress Number 90-82533

Arranged in 12 parts with additional special sections. Distributed in print format (loose-leaf, with binder and separator tabs, 1,000 copies), on microfiche (25 copies), and digitally on five ASCII-format 5.25-inch disks (25 copies). Contributors added introductory essays for parts of the bibliography.

[See Appendix B to Part 1 in THE GRAND CANON Volume 1/Part B for collated pagination sequence and tab placements for this edition and *Supplement 1* (1993).]

1993 **Bibliography of the Grand Canyon and the Lower Colorado River; from 1540. SUPPLEMENT 1. 1992.**

Earle E. Spamer, compiler (WITH Daniel F. Cassidy and John Irwin)

Grand Canyon, Arizona: Grand Canyon Natural History Association, *Monograph 8, Supplement 1*, separately paginated sections [continuing the pagination of parts in 1990 ed.] [174 pp.] [combined 1990/1993 volume 544 pp.]

ISBN 0-938216-47-3, Library of Congress Number 93-70396

Distributed in print format (loose-leaf, 1,000 copies), on microfiche (25 copies), and digitally on two ASCII-format 5.25-inch disks (25 copies). No more supplements produced.

[See Appendix B to Part 1 in THE GRAND CANON Volume 1/Part B for collated pagination sequence and tab placements for 1990 edition and *Supplement 1*.]

Concurrent Internet and digital-media editions 2000 – 2021

2000–2021 **A Bibliography of the Grand Canyon and Lower Colorado River. [INTERNET EDITION.]**

Earle E. Spamer, compiler and editor (WITH CONTRIBUTORS Richard D. Quartaroli and Daniel F. Cassidy)

Online, www.grandcanyonbiblio.org. Sponsored and hosted by Grand Canyon Association/ Grand Canyon Conservancy, Grand Canyon, Arizona.

Arranged in 34 parts; later reduced by the deletion of two parts. Available online only as a searchable database. First posted January 2000, and continually updated thereafter. Updates ceased June 2015; **website discontinued October 2021**.

[See Appendix C to Part 1 in THE GRAND CANON Volume 1/Part B for contents and arrangement of the Internet Edition.]

[*NOTE*: Two printed copies of the first state (January 2000) of the Internet Edition were made by Spamer, 1453 pp. One was given to the Special Collections and Archives, Cline Library, Northern Arizona University, Flagstaff (call no. F788.S636 2000); the other is in the author's possession.]

THE GRAND CANON

2012 **The Grand Canon : 1548-2012**

A Directory to 48,600 Published Items and New Content On the Grand Canyon and Lower Colorado River Region—Arizona, Nevada, California, Baja California, Sonora—Southwestern United States–Northwestern Mexico.

Earle E. Spamer

Philadelphia: Earle E. Spamer (A Raven's Perch Digital Production)

Digital product—Portable Document Format (PDF) (pagination [1-2], i-l, 1-1826, I-XVIII, 1827-4988, I-XII, 4989-5207.) Digital copy (DVD) filed with U.S. Copyright Office.

Updated bibliographical listing of items published worldwide in 55 languages. Enumerated and cross-listed to previous bibliographies and standard reference lists. Extra features include introduction, commentaries, surveys of comparable works, and a nomenclatural appendix on the term "Grand Canyon" as used in geographical nomenclature, analogy and metaphor. Expanded and improved layout. [The subtitle published-item count will increase as the bibliography grows.]

Monographic version in 32 parts as searchable PDF (Portable Document Format) digital document with hyperlinks. First formal publication on CD-ROM April 2012.

[*NOTE*: An informal, test release was prepared in February 2011 as the "Comprehensive Edition" and privately distributed on CD-ROM to a few users. It is not one of the sequence of formal editions.]

[*NOTE*: Two color-printed copies of the non-bibliographical components of the First Edition were produced by Spamer in 2012. One is in his possession; the other is in the possession of Richard D. Quartaroli.]

2015 **The Grand Canon : Second Edition : 1542-2014**

A Bibliography of 65,000 Published Items in Printed and Other Media About or Including the Grand Canyon and Lower Colorado River Regions — Arizona, Nevada, California, Baja California, Sonora — Southwestern United States–Northwestern Mexico.

Earle E. Spamer

Philadelphia: Raven's Perch

A Raven's Perch Digital Production, Portable Document Format (PDF) (pagination [iv], 6798 pp.) Digital copy (DVD) filed with U.S. Copyright Office.

Updated bibliographical listing of items published worldwide in 65 languages. Enumerated and cross-listed to previous bibliographies and selected standard reference lists. Extra features include introduction and the second edition of the nomenclatural appendix on the term "Grand Canyon" as used in geographical nomenclature, analogy, metaphor and neology. Expanded and improved layout throughout, with added features not available online.

Monographic version in 32 parts as searchable PDF (Portable Document Format) digital document with hyperlinks. Distributed on CD-ROM.

[*NOTE*: Two color-printed copies of the non-bibliographical components of the Second Edition were produced by Spamer in 2015. One is in his possession; the other is in the possession of Richard D. Quartaroli.]

Digital-media editions 2019– 2025

2019 **The Grand Canon**

A worldwide bibliography of the Grand Canyon and lower Colorado River regions in the United States and Mexico, 1535–2018 : 90,000 categorized and augmented citations for publications from around the world in 95 languages : with extensive background and supporting information

El Gran Canon

Una bibliografía mundial del regiones del Gran Cañón y bajo Río Colorado en los Estados Unidos y México, 1535-2018 : 90 000 citaciones categorizadas y aumentadas para publicaciones del alrededor del mundo en 95 idiomas : con antecedentes extensivos e información de apoyo : (idioma principal del tomo en inglés)

Earle E. Spamer

Philadelphia: Raven's Perch Media https://ravensperch.org

3rd Edition

A Raven's Perch Digital Production, Portable Document Format (PDF) (pagination 11,724 p. : [I-X], I-XVI, [1-2], A-M, Español A-N, [1-2], i-xiii [xiv], Introduction 1-487 [488], [1-2], Bibliography 1-10,993 [10,994], [1-2], Nomenclatural Appendix 1-163 [164], [1-2])

Digital copy filed electronically with U.S. Copyright Office.

Updated bibliographical listing of items published worldwide in 95 languages. Enumerated and cross-listed to previous bibliographies and selected standard reference lists. Extra features include introduction and the third edition of the nomenclatural appendix on the term "Grand Canyon" as used in geographical nomenclature, analogy, metaphor and neology. Expanded and improved layout throughout, with added features not available online.

Monographic version in 32 parts as searchable PDF (Portable Document Format) digital document with hyperlinks. Distributed on various digital media and accessible online at https://ravensperch.org.

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Earle E. Spamer

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Earle E. Spamer (compiler)

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[When the first volume of THE GRAND CANON was produced in 2012 this compilation was inserted as an appendix therein, with the title, "The Biggest Mirror"; the 2nd and 3rd editions of THE GRAND CANON (2015, 2019) included updated versions. In January 2021, a newly updated version was made a separate offering on the Raven's Perch Media website, there with the new title, "Colossal Mirror", with the intention of occasionally updating it on that website. This 1st Edition now formally produces this compilation as a separate volume of THE GRAND CANON.]

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[See Contents Page in present volume for contents and arrangement of Volume 1/Part A.]

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[See Contents Page transcribed in present volume for contents and arrangement of Volume 1/Part B.]

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Earle E. Spamer (compiler)
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2nd Edition
THE GRAND CANON, Volume 3
A Raven's Perch Digital Production, Portable Document Format (PDF) (pagination x, 203 pp.)
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The RAVEN'S PERCH MEDIA colophon recalls this bird's habit of gathering and caching objects. Derived from original artwork by Balduin Möllhausen, it is a fine detail from the lithograph delineated by J. J. Young that is "General Report Plate VII" in Joseph C. Ives' *Report Upon the Colorado River of the West, Explored in 1857 and 1858* (Washington, 1861), which depicts a wintry camp just south of the Grand Canyon. The scene was sketched and described by Möllhausen on April 10, 1858, while he was perched in a nearby tree. He noted (in translation here), "a couple of ravens [*paar Raben*] croaked morosely on the bare branches of a dried-up fir tree as they waited impatiently for our departure, so that they could scout around the abandoned campsite for fat morsels." (Möllhausen, *Reisen in die Felsengebirge Nord-Amerikas bis zum Hoch-Plateau von Neu-Mexico, unternommen als Mitglied der im Auftrage der Regierung der Vereinigten Staaten ausgesandten Colorado-Expedition*. Hermann Costenoble, Leipzig, 1861, Vol. 2, p. 83.) Möllhausen's original watercolor painting is now in the Amon Carter Museum of American Art (Fort Worth, Texas; https://www.cartermuseum.org/collection/character-high-table-lands-1988146).

Raven's Perch Media was created in 2018, but Möllhausen's remarks on this very scene were not discovered until the translation was made for *Möllhausen's Grand Canyon*, another Raven's Perch Media production (2022).

Coda :

"The start from Green River Station".
John Wesley Powell, *Exploration of the Colorado River of the West and its Tributaries* (Government Printing Office, Washington, 1875), Figure 4.

From the Pictorial Introduction (2012)—see Chapter 1 herein

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